TRIUMPH R/C

REPLACING THE BALANCE BAR TO UPPER ROTOR CONNECTOR:

There is a small connector which connects the upper rotor to the balance bar. If this connector is lost, broken, or disconnected, a replacement is included with your Triumph. Follow the replacement steps listed below.

1. *The connector is attached by 2 simple ball joints. Remove the broken connector by pulling it away from the axle of the main rotors. Once removed, the 2 ball joints will be exposed.*
2. *Install the new connector following the reverse of step 1. Gently but firmly press the connector into position, connecting the upper rotor and the balance bar. The connector will just snap into the 2 ball joints as shown.*

TROUBLESHOOTING

ISSUE:	CAUSE:	CORRECTIVE ACTION:
Helicopter will not start, LED on helicopter is off.	1. Helicopter not turned on. 2. Battery is not charged. 3. Helicopter was not set to off during charging. 4. Rotors locked for overload protection.	1. Turn helicopter on. 2. Charge internal helicopter battery. 3. Ensure helicopter is off and charge internal helicopter battery. 4. Slide helicopter's on / off switch to off, then switch on again.
Helicopter will not start, LED on helicopter is ON.	1. Transmitter is not turned ON. 2. Radio link between the transmitter and the helicopter is not initialized. 3. Helicopter's battery is low.	1. Turn transmitter on. 2. Push left stick (UP/DOWN – throttle) completely to UP, then back DOWN to initialize radio link. 3. Ensure helicopter is off and charge internal helicopter battery.
Helicopter is flying too high.	1. You need to reduce the throttle.	1. Move the left stick (UP/DOWN – throttle) gradually down.
Helicopter is flying too low.	1. Needs more power/throttle. 2. The helicopter's battery is low.	1. Move the left stick (UP/DOWN – throttle) up. 2. Ensure the helicopter is off and charge the internal helicopter battery.
Helicopter doesn't hover.	1. The helicopter drifts forward and backward.	1. Push the right stick (FORWARD/BACKWARD) backward/forward to compensate and hold the helicopter in position.
Helicopter doesn't fly backwards	1. The helicopter only flies backwards briefly then spins to fly forward.	1. Aerodynamics make backward flights more difficult than forward flight which is normal. Practice flying backwards and control the left/right turning motion of the helicopter to keep the tail pointed in the direction you desire.
Helicopter doesn't move forward fast enough.	1. The battery charge is getting low. 2. The tail rotor is damaged. 3. The helicopter center of gravity is no longer correct.	1. Turn the helicopter off and charge the internal helicopter battery. 2. Replace the tail rotor with new unit from the replacement rotor kit (not included) 3. Use light adhesive tape to mount a clip on the front bottom of the helicopter to add weight and adjust the center of gravity. See also "Helicopter doesn't hover" issue.
Helicopter always turns.	1. Trim control is not set correctly. 2. The rotor blades have been damaged/ or experience wear of use.	1. Adjust the trim control knob. See "FIRST-FLIGHT -TRIMMING YOUR HELICOPTER" section. 2. Replace the blades! It is hazardous to fly with damaged blades!
The main rotors spin erratically causing unpredictable flight characteristics.	1. The balance bar to upper rotor connector is either broken or missing.	1. Install a new connector using the instructions in the "REPLACING THE BALANCE BAR TO UPPER ROTOR CONNECTOR" section.

PLEASE! DO NOT RETURN THIS PRODUCT TO ANY RETAIL STORE!

For any questions or problems with this product please contact us at:Email: info@interactivetoy.com
Phone: Inside North America: +1-416-444-6873 Outside North America: 1-866-214-2220
Address: Interactive Toy Concepts, 17 Vulcan Street, Toronto, Ontario, Canada. M9W 1L3

IMPORTANT WARNINGS!

Spinning propellers may cause severe injury to eyes, potentially causing blindness if they contact the eyes. Do not fly the Triumph helicopter near or towards the face. Especially do not fly the Triumph helicopter near or towards the eyes. Interactive Toy Concepts Ltd. will not accept liability for misuse of the Triumph helicopter causing any bodily injury, including, but not limited to eye injury.
Spinning propellers may cause extensive and possibly irreparable damage to television sets, light fixtures, and other furniture and accessories commonly found at home and in other indoor locations. Do not fly the Triumph helicopter indoors. Especially do not fly the Triumph helicopter near or towards any television sets, light fixtures, or any other furniture or household accessories. Interactive Toy Concepts Ltd. will not accept liability for misuse of the Triumph helicopter causing any damage to television sets, light fixtures or any other furniture or household accessories.

IMPORTANT SAFETY INFORMATION

Keep the BladeRunner Triumph helicopter away from face, eyes and hair at all times. Keep fingers away from moving rotors or propellers. Do not fly the helicopter near or at other people or animals. Use caution when flying, make sure people around you know that you are playing with the helicopter. Recommended for use outdoors and indoors. When flying outdoors avoid operating your BladeRunner Triumph helicopter near power-lines, trees, or roof-tops. Do not fly your BladeRunner Triumph helicopter during windy conditions, rain or any other form of precipitation or harsh weather. Also make sure that your BladeRunner Triumph helicopter does not have the opportunity to land in a wet or hazardous area such as snow, water, mud, or rocks. When flying indoors, only fly in rooms without obstacles, breakable objects or fans. The USB charging cable provided in this package is for charging the helicopter ONLY. Do not use any other source to charge the helicopter. Do not attempt to overcharge your helicopter. Follow the charging instructions provided in this instruction manual.

IMPORTANT BATTERY INFORMATION

Use only batteries recommended in this instruction manual. Do not mix old and new batteries. Do not mix alkaline, standard, lithium, rechargeable, or different types of batteries. Do not use rechargeable batteries. Be careful to install the batteries with the correct polarity, as indicated. Battery should be replaced by adults. Rechargeable batteries are only to be charged under adult supervision. Never leave a battery unattended while it is being charged. Never leave a battery unattended in the presence of children. Non-rechargeable batteries are not to be recharged. Rechargeable batteries are to be removed from the toy before being charged. Do not throw batteries into the fire. Exhausted batteries are to be removed from the toy. The supply terminals are not to be short-circuited. The Triumph uses one 9-Volt (not included).

FCC NOTE: U.S. ONLY

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.
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. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment. 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 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 turn 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 to 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.

Industry Canada Notice: Canada only.

This radiocommunication device complies with all the requirements and limits of Industry Canada Standard RSS-310.
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. Field Strength and measurement distance: 27.145MHz – 61.35 dBµV/m at 3 meter. 49.860MHz - 59.69 dBµV/m at 3 meter.

Limited 30-day warranty
Product is warranted by Interactive Toy Concepts Limited against manufacturing defects in material and workmanship under normal use for thirty (30) days from the date of purchase.
Warranty is validated upon receipt of proof or purchase and confirmation of UPC code.

Proof of Purchase

Lithium Polymer Rechargeable Batteries must be recycled or disposed of properly.

Manufactured by and distributed by Interactive Toy Concepts Ltd. Conforms to Safety Standards ASTM F963 Meets CPSC Safety Requirements.
Regulatory Requirements. Products and colors may vary. MADE IN CHINA.

INS-50418-130601-US

BLADERUNNER SERIES TRIUMPH R/C

INSTRUCTION MANUAL

AGE 12+

The BladeRunner Triumph is a delicate machine, before removing it from the packaging please read the instructions!

Congratulations on the purchase of your BladeRunner Triumph helicopter. The BladeRunner Triumph brings advanced, hobby-level flying technology to beginner, medium level or advanced flyers who are looking for great performance from a relatively smaller helicopter. The BladeRunner Triumph has built-in advanced gyroscope technology for providing an ultra-smooth flight and balance control assistance. The BladeRunner Triumph is available in 2 radio-control frequencies: 27 MHz and 49 MHz. Do not throw away this instruction manual as it contains valuable information for the operation of your helicopter as well as warranty information. The helpful tips in this pilot's manual will improve your skill and enhance your experience. Look for these Tips symbols for extra help.

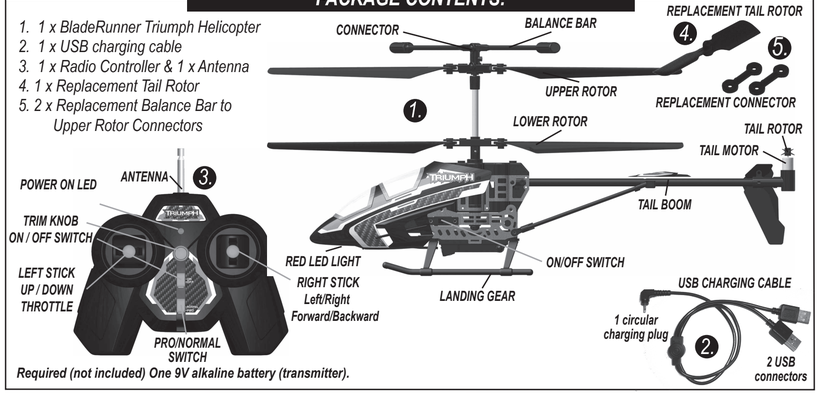
UNPACKING YOUR BLADERUNNER TRIUMPH HELICOPTER:

To prevent damage during shipping, the BladeRunner Triumph is securely fastened in the package. Please ensure that all of the tie-down and fastening locations are unfastened before attempting to remove the BladeRunner Triumph from the package. Be very careful when removing the BladeRunner Triumph to prevent damaging the helicopter.

Warning: Spinning propellers can cause injury to people, animals and plants as well as damage to furniture and other property. To avoid the risk of injury or damage, stay clear of spinning propellers. Always keep a minimum distance of about 80 inches (2 meters) between the spinning propellers and people, pets, or other objects.

PACKAGE CONTENTS:

1. *1 x BladeRunner Triumph Helicopter*
2. *1 x USB charging cable*
3. *1 x Radio Controller & 1 x Antenna*
4. *1 x Replacement Tail Rotor*
5. *2 x Replacement Balance Bar to Upper Rotor Connectors*



Required (not included) One 9V alkaline battery (transmitter).

TRIUMPH R/C

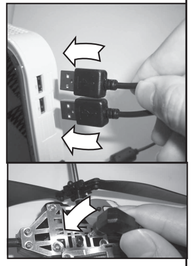
INSTALLING BATTERIES:

Your BladeRunner Triumph helicopter has a built-in, non-removable, non-replaceable, rechargeable Lithium-Polymer battery. Do not tamper with this battery. Tampering with this battery is dangerous and will void the warranty.
The BladeRunner Triumph controller requires one 9-volt battery (not included). Install the battery as shown:

1. *Open the battery compartment door on the back of the BladeRunner Triumph controller by sliding it down. (Note, there is no screwdriver required).*
2. *Insert the 9-Volt battery as shown. Make sure to respect the polarity.*
3. *Replace the battery compartment door and slide it up until it clicks to be sure it is closed.*

CHARGING YOUR TRIUMPH HELICOPTER:

1. *Ensure the BladeRunner Triumph helicopter's ON/OFF switch is in the OFF position. The red LED at the bottom front of the BladeRunner Triumph helicopter will turn off when the helicopter is turned off.*
2. *Note the USB charging cable has two USB connectors. Plug both of these USB connectors into the USB power source.* ***Always insert the 2 USB connectors to the 2 USB power sources before inserting the circular charging plug to the Helicopter.***
3. *Once the 2 USB connectors are securely plugged into the power source, connect the circular charging plug into the charging port located on the right side of the helicopter.*



Make sure the electronic device (USB power source) is turned on and is delivering power through the USB charging cable.

4. *Charging will start automatically. Note, the red LED at the bottom front of the Triumph helicopter will turn on during charging even though the helicopter is turned off.*
   Charging will take 30 – 60 minutes for 4-6 minutes of flight.
5. *Once the charging is complete, the red LED on the bottom front of the Triumph helicopter will turn off.*
6. *Make sure to unplug the USB charging cable from the 2 USB ports on the power source first. Secondly, unplug the circular charging plug from the helicopter's charging port.*
7. *The Triumph helicopter is now ready to fly.*

Color LED showing battery power and charging status

Red LED is ON:
Helicopter is either turned ON, or is turned OFF but is charging.

Red LED is OFF:
Triumph helicopter is turned OFF and is either not charging, has finished charging, or is turned ON but the battery is depleted.

Red LED Dim:
The battery voltage is low.

Tip GET IN THE AIR FAST!!! THE BLADERUNNER TRIUMPH HELICOPTER IS PARTIALLY CHARGED SO YOU CAN FLY IMMEDIATELY OUT OF THE BOX.

Tip CHARGE TIME VARIES BASED ON HELICOPTER'S INTERNAL BATTERY CHARGE CONDITIONS. TYPICALLY AFTER A 4 - 6 MINUTE FLIGHT THE HELICOPTER WILL NEED A 30 – 60 MINUTE CHARGE.

Tip YOU DO NOT NEED TO WAIT FOR THE CHARGE TO BE COMPLETE TO FLY. SHORTER CHARGE TIMES = SHORTER FLIGHT TIMES.

!!! Warning !!! *Do not charge the helicopter by using 2 different USB sources such as 2 different computers or laptops. The 2 USB sources used must be from the same computer, laptop or other USB empowered device.*

WARNING!: Interrupting the charge before the charge cycle is completed will not damage the battery, however for the longest flight times please let the charger finish its charge cycle.

TRIUMPH R/C

CHOOSING YOUR FLYING LOCATION:

You can operate your Triumph helicopter outdoors on a calm day or indoors. The outdoor space should be at least 50 feet x 50 feet (15 meters x 15 meters) with a height allowance of about 33 feet (10 meters). Avoid operating your Triumph helicopter near power-lines, trees, or roof-tops. Do not fly your Triumph helicopter during windy conditions, rain or any other form of precipitation or harsh weather. Make sure that your Triumph helicopter does not have the opportunity to land in a wet or hazardous area such as snow, water, mud, or rocks. The Triumph helicopter is not water resistant. If flying your Triumph helicopter indoors, the area should be roughly 16 feet x 16 feet (5 meters x 5 meters). The radio control range of your Triumph helicopter is up to 33 feet (10 meters), and varies depending on interference within the operational environment.

GETTING TO KNOW THE TRIUMPH TRANSMITTER:

The transmitter is a digital proportional radio, therefore small movements in the control sticks produce precise control.
ON / OFF SWITCH *- Turns the transmitter ON and OFF.*
LED *- Turns on when the transmitter is on.*
ANTENNA *- Fully extend to ensure the greatest control range.*
PRO / NORMAL SWITCH *- In normal mode, the helicopter will fly forward and backward, and turn left and right at normal speed. In Pro mode the helicopter will fly forward and backward, and turn left and right with a faster speed.*
LEFT STICK - UP / DOWN *- Controls the altitude/throttle. The further you push the left stick up, the higher the helicopter will fly.*
RIGHT STICK - UP / DOWN *- Controls the forward/backward movement and speed of the helicopter. Move the stick away from you - the helicopter flies forwards. Move the stick towards you - the helicopter flies backwards.*
RIGHT STICK - LEFT / RIGHT *- Controls left/right steering direction of the helicopter. Move the stick to the left to turn the helicopter to the left.Move the stick to the right to turn the helicopter to the right.*
Tip As the Triumph helicopter is flying towards you, you will naturally experience a phenomenon called "Control Reversal". Thus moving the right stick to the right will make the helicopter fly to your left side. Moving the right stick to the left will make the helicopter fly to your right side.

PRE-FLIGHT CHECKLIST

ATTENTION:
Check the condition of all the rotor blades prior to each flight. Do not try to operate the Interceptor helicopter if any rotor blade has been damaged. Broken or damaged rotor blades may have sharp edges or corners and they will be spinning fast with a potential for injury! Flying the Interceptor helicopter with broken rotor blades can also make the helicopter fly in an unstable or uncontrollable manner. This may cause damage to furniture and other property, as well as injury to plants, animals and people. Broken rotor blades can be easily replaced as described in the "REPLACING DAMAGED ROTOR BLADES" section below.

1. *Insert Antenna into controller and turn it until it is securely in place.*
2. *Extend Transmitter Antenna.*
3. *Turn on the Transmitter.*
4. *Select either the normal mode or the pro mode on the Transmitter by sliding the Pro/Normal switch to the desired setting.*

Tip In normal mode, the helicopter will fly forward and backward, and turn left and right at normal speed. In Pro mode the helicopter will fly forward and backward, and turn left and right with a faster speed. Normal mode is recommended for beginners and intermediate users, while Pro mode is recommended for advanced users.

5. *Turn on the fully charged helicopter. Note, the red LED at the bottom front of the helicopter will turn on.*
6. *Set helicopter on a horizontal flat surface for the best take-off.*
7. *Push left stick (UP / DOWN) completely all the way UP then all the way down again initialize the radio link between the transmitter and the helicopter.*
8. *Gently push the right stick (UP / DOWN - throttle) up to increase the throttle and ensure that the rotors start spinning. Now that you know your helicopter is functioning as it should - RELAX! -DO NOT TAKE OFF!*

Tip Be sure to read the next section on "FIRST FLIGHT - TRIMMING YOUR HELICOPTER" before your first flight!

FIRST FLIGHT - TRIMMING YOUR HELICOPTER:

Your helicopter must be "trimmed" to stop unwanted rotation. First, using the left control stick, simply raise the helicopter to eye level and turn the trim control knob (as shown) on the controller either left or right until the helicopter stops spinning. This should be done every time you fly your helicopter after charging. The trim setting will vary as the helicopter battery drains. Re-adjust trim during flight as required.

TRIUMPH R/C

FLYING YOUR TRIUMPH HELICOPTER:

TAKE OFF *- To take off, the rotors need to spin up to speed to produce lift. For great take-offs use the following steps.*

1. *Push the left stick (UP/DOWN throttle) completely all the way UP and watch the helicopter leap off the ground.*
2. *Once off the ground, gently reduce the throttle so that the helicopter is at the desired height above the ground.*
3. *Fly forward by moving the right stick up. Since this is a digital proportional control stick, you will be able to attain a very smooth transition between slower and faster forward speeds as well as hovering in place.*
4. *Fly backwards by moving the right stick down. Since this is a digital proportional control stick, you will be able to attain a very smooth transition between slower and faster backwards speeds as well as hovering in place.*
5. *Turn left or right by moving the right stick from left to right. Since this is a digital proportional control stick, you will be able to attain a very smooth transition between turning left and turning right. Move the stick quickly for a quick turn, or slowly for a slow turn.*
6. *Congratulations! You are flying your Triumph Helicopter. Enjoy!*
7. *To land your helicopter, gently and gradually move the left stick all the way down. This will slow the rotation of the main rotors and the helicopter will land. It is very important to NOT move the left stick all the way down suddenly, as the main rotors will stop spinning instantly and the helicopter will fall and possibly sustain damage.*

8A. *To fly again, it may or may not be necessary to recharge your helicopter, depending on the charge that is remaining in the helicopter's internal Lithium-Polymer battery. Simply follow the steps described in the "CHARGING YOUR TRIUMPH HELICOPTER" section above to recharge your helicopter.*

8B. *If you are finished playing, turn off the Triumph Helicopter and Transmitter by sliding their ON/OFF switches to the OFF position.*

FLYING TIPS!

Altitude Control *- the throttle control (left stick) is a digital proportional system, therefore fine movement of the throttle stick will produce minor changes in the helicopter altitude.*
Tip Take time to practice controlling the altitude and getting accustomed to the throttle sensitivity.
Trimming *- Once flying at the desired height the helicopter may be spinning under the rotors instead of holding a heading. Adjust the trim control so that the helicopter body does not spin: Turn the trim control left if the body is spinning right (Clockwise) - Turn the trim control right if the body is spinning left. (Counter Clockwise).*
Note: *many factors affect the trim of the helicopter such as battery condition, throttle setting and damage to the rotors. It may be required to adjust the trim control more than once during a flight. Once trimmed, minor corrections can be managed using the steering control in conjunction with the trim control knob. The helicopter should never be flown with damaged rotor blades. Flying the helicopter with damaged rotor blades is very hazardous. See "TROUBLESHOOTING" and "REPLACING DAMAGED ROTOR BLADES" sections for more information.*
Forward Flight *- the best forward flight motion is achieved by gently moving the right stick (forward) up, this produces the smoothest transition from hover to moving forward flight. Sharp or abrupt movements can cause the helicopter to "porpoise" or swing, but might be required to overcome a slight wind or draft.*
Direction control *- Direction control convention is based as if you were sitting in the pilot's seat of the helicopter. The RIGHT stick on the transmitter controls the steering of the helicopter. Pushing the stick left results in a left turn. Pushing the stick right results in a right turn.*
Control Reversal *- When the helicopter is flying towards you the steering will appear to reverse.*

REPLACING DAMAGED MAIN ROTOR BLADES (NOT INCLUDED):

1. *Locate the broken rotor blade and use a small Philips screw-driver (not included) to unscrew the tiny screw that holds the rotor blade in place on the rotor hub. Be careful not to lose the screw as it is tiny.*
2. *Pull the damaged rotor blade horizontally out of its location on the rotor hub.*
3. *Install a new rotor blade in the same location on the rotor hub by sliding it in horizontally. The holes for the screw have to align. It is very important that the correct rotor blade is installed as the upper and lower main rotor blades may appear to be similar but are in fact very different. The helicopter will not be able to fly if the incorrect rotor blades are installed.*
4. *Fasten the new rotor blade to its mounting point on the rotor hub with the same tiny screw. Do not over tighten the screw as the rotor blade needs to be able to spin freely inside its rotor hub housing mounting point.*

REPLACING DAMAGED TAIL ROTOR:

1. *Locate the broken tail rotor on the end of the helicopter's boom.*
2. *Remove the broken tail rotor by gently pulling it upwards off of the tail motor's axle shaft.*
3. *Install the replacement tail rotor by sliding it onto the tail motor's axle shaft in the reverse process as outlined in step 2.*
4. *Gently press down on the replacement tail rotor until it is firmly in place.*