

Warranty & Safety

Radio Controlled Helicopters of this size are not Toys!

Please read before use.

Radio controlled helicopters use various high tech electronic technologies and products. Improper use of these products can result in serious injury, or even death. Please read this manual carefully before flying the Rush 750TM. Make sure to be conscious of your own safety and the safety of others.

Neither ALeeS Inc nor its affiliated groups or sellers have any control over the assembly, maintenance, and use of this product. Therefore, no responsibility can be traced back to the manufacturer. By assembling and flying this product, you hereby agree to release ALeeS Inc., its Distributors, Dealers, and Affiliates from any responsibility or liability arising from the use of this product.

The user/purchaser is responsible for common knowledge and observance of one's own safety and the safety of others that may be affected by the use of the product be they a participant or spectator. This radio controlled helicopter is intended for use only by those with experience flying radio controlled helicopters at a legal flying field. After the sale of this product, we cannot maintain any control over its operation or usage. We recommend that you obtain assistance from an experienced pilot before attempting to fly our products and to help verify proper assembly, setup, and flight of your model for the first time. This ALeeS_{TM} helicopter is a consumer item that requires a certain degree of skill to operate. Any damage or dissatisfaction as a result of accidents or modifications are not covered by any warranty and cannot be returned for repair or replacement.

Safety notes:

You can lose control over the helicopter at any given moment for a number of reasons, NEVER fly over or near other people.

Choose a legal flying field

- Verify air field to have ample space, flat, and smooth ground.
- Clear airfield from debris and obstacles.

Do not operate:

- If model has been in contact with rain, moisture, or contaminants.
- If model has been in contact with fire or high heat plastics are very susceptible to damage or deformation due to heat.
- In crowed areas.
- Near homes, schools, or hospitals.
- Near roads, railways, or power lines.
- Near another radio controlled unit that uses same frequency.
- Do not allow children to operate.
- If tired, sick, or under the influence of drugs or alcohol.
- If beginner or individual(s) planning to operate a borrowed helicopter without being familiar with model or safety instructions.

Inspect All Parts:

- Before each flight, check for damaged parts and verify all parts operate normally with all functions in order.
- Adjust the positioning of movable parts and check that all nuts, bolts, screws are fastened correctly in accordance to this instruction manual.
- Verify all parts are installed correctly.
- Verify that there are no abnormalities that would adversely affect the flight of the helicopter.
- Verify all batteries on board helicopter and transmitter are to a sufficient level of charge.
- Exchange or repair damaged or worn parts using only parts shown in this instruction manual, or via the online catalog.
- Verify there is no introduction or exposure to water or moisture in any form.

During operation of helicopter:

- Maintain safe distances from aircraft and rotating main/tail rotor blades.
- Always be aware of your surroundings and be conscious of your actions.
- Never leave your model unattended.
- Maintain eye contact during all aspects of flight.

- Maximum main rotor speed of 2000 RPM's for 690-710mm rotor blades, and 1800 RPM's for 720mm+ rotor blades, or maximum specified speed by the rotor blade manufacturer. Failure to maintain these speeds could result in catastrophic failure of either the aircraft and/or rotor blades which could result in injury or even death!

Mechanical Features

Chassis and Drive System:

Main gear CNC Helical 112T modulus 1 104T Auto-Rotation Gear Modulus 1 24T Counter gear Modulus 1 24T Bevel Gears Modulus 1 Dual Ball Bearing supported one-way hub assembly with Sprag style Clutch Bearing. Triple main shaft bearing support Bridged center bearing block to motor mount for superior drive system rigidity. Motor shaft End support bearing block. Large open saddle style battery pockets for up to 7s packs with room to spare. Ample space for modern electronics placement. Protective flybarless gyro mounting compartment. Easy servo install/removal design. Zero pitch mechanical alignment pining system. Canopy pin break away system. "A" arm swash phasing with bell crank control to preserve servo precision and reduce servo wear commonly found on direct linkage side loaded servos. 2mm Carbon Fiber frame parts

Tail System:

Ultra rigid aluminum tail boom Ultra rigid torque tube shaft with quad ball bearing support Split ring tail control rod guides for easy install/removal Compact tail hub and gear box Dual supported pitch mechanics Anti-Twist tail case w/ safety locking pin screw. Dual radial and thrusted tail blade grips

Head System:

Robust triple radial bearing main blade grips 10mm Spindle shaft 1 piece flap Hard 3D dampers Compact center hub Patent Pending "New" Innovative combined Phasing/Pitch/Cyclic control levers with dual step bearing placement for increased operational precision and low servo loading Heavy duty plastic ball links for today's high-power demands Compact swash plate with maintenance friendly design Stainless steel linkage balls for strength and improved wear resistance

Helicopter Assembled Specs:

Length: 1190mm (No Canopy) Height: 418mm Width: 203mm Air Frame only with canopy weight: 2.1kg Approximate Ready to fly weight: 5.08kg (11.2Lbs) Main Rotor Diameter w/ 710mm blades : 1608mm Tail Rotor w/115mm blades: 296mm Torque Tube drive gear ratio: 4.33:1

Tools And Equipment Needed

Electronics and Drive System:

- (2) 6s1p 5000mAh 35c Plus Lipo Batteries with connectors
- (1) 2s1p 2500mAh RX battery or BEC
- (3) Metal gear servos 100 in-oz. (7.2 kg-cm) Minimum
- (1) Tail servo (metal gear prefered)
- (1) 10 inch (25 cm) servo lead extension (For tail servo)
- (1) 6 inch (15cm) servo lead extension (For elevator servo)
- (1) 100 amp High voltage ESC
- (1) Flybarless gyro system
- (1) Brushless motor eqaul to 4035 450 or 500kv
- (1) Minimum 6 channel Transmiter (Modern)
- (1) Lipo battery charger
- (1 set) Carbon Fiber Main rotor blades 690-710mm
- (1set) Tail rotor blades 105-115mm

Materials:

- Blue thread lock compound (medium)
- Red thread lock compound (strong)
- CA Glue (medium gap filing) or Epoxy
- Sand paper (fine or medium grit 220- 400)
- Bearing grease
- light weight oil
- Adhesive back hook and loop tape
- Hook and loop strap
- (1) Tensioning style hook and loop strap
- Double sided foam tape
- 4 inch (100mm) wire ties
- Assorted sizes of heat shrink tubing

Tools:

- 1.5mm Hex driver
- 2mm Hex driver
- 2.5mm Hex driver
- (2) 3mm Hex drivers
- (2) 5mm Hex "L" wrenches (provided)
- 4mm Hex "L" wrench (provided)
- 4mm wrench or nut driver
- Large and small point philips head screw driver
- Ball link pliers
- Long nose pliers
- Wire cutter
- Metric ruler
- Calipers
- Soldering Iron 50 watt minimum
- Heat gun
- Work cloth (hand towel)
- Ball link threading tools







































































Notes:	