Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

REV 156

3.5 CHANNEL REMOTE CONTROLLED



ITEM 62578

Visit our website at: http://www.harborfreight.com Email our technical support at: productsupport@harborfreight.com



When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.

Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein.

Tools required for assembly and service may not be included.

AWARNING

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

Important Safety Information

- Do not allow children younger than age 14 to use this Helicopter. Children should not operate without adult supervision.
- Only fly outdoors during daylight hours in an area with no obstructions, power lines, vehicles, animals or people nearby.
- Do not fly in temperatures above 113° F or below 50° F.
 Do not fly in wet or windy conditions.
- Keep spectators and pets away. Spectators should only watch from a safe distance.
- Position remote control batteries in proper polarity. Do not install batteries of different types, charge levels, or capacities together in remote control.
- Do not open the Helicopter's housing or modify its design.
 Doing so may cause damage and/or make it dangerous.
- Do not use if parts are loose or damaged. If the toy has been damaged, immediately stop using it.

- WARNING: The cord of this product contains lead and/or di (2-ethylhexyl) phthalate (DEHP), chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, et seq.)
- People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
- 10. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.
- Maintain product labels and nameplates. These carry important safety information.
 If unreadable or missing, contact Harbor Freight Tools for a replacement.

Lithium Battery Charging Safety

- Do not leave Helicopter unattended while charging.
- 2. Battery charging should be done by adults only.
- 3. Use the supplied charger only.
- 4. Charge on non-flammable surface and keep away from flammable items.
- 5. Disconnect AC wall chargers from outlets while not in use.

- If battery-powered device has been damaged, immediately stop use, unplug, and safely move away from flammable materials.
- Follow instructions for charging battery. DO NOT charge longer than recommended.
- 8. Allow a clearance of at least 4" on all sides during charging.

Personal Safety

- Operator and spectators must wear ANSI-approved safety goggles during use.
- Do not wear loose clothing or jewelry. Keep hair and clothing, and away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Do not use the Helicopter while tired or under the influence of drugs, alcohol, or medications. A moment of interruption can result in serious personal injury.

Specifications

Remote Control Battery Type	6-AA (sold separately)		
Helicopter Battery Type	3.7V / 1100 mAh rechargeable Lithium-ion		
Battery Charging Time	2 hours max		
Flying Time	Approximately 5 minutes		
Cool Down Time Between Charges	30 minutes		
Range	50 feet		
Operating Frequency	27.145 MHz		



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.

FCC ID: 2AD4V000001

Set Up



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this document including all text under subheadings therein before set up or use

AWARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Switch the Helicopter and Remote Control OFF before performing any procedure in this section.

Charging Helicopter

<u>CAUTION!</u> Do not leave Helicopter unattended while charging. Battery charging should be done by adults only. DO NOT charge longer than 2 hours.

 Locate the Battery Cables under front of the Helicopter.

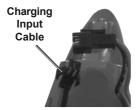


Figure A

- Plug Power Supply into Charging Input Cable, then plug other end into a grounded 120V outlet.
- When charging is complete, disconnect Helicopter from Power Supply, then unplug Power Supply from outlet.

<u>CAUTION!</u> Allow Battery to cool down for 30 minutes between charges.

Remote Control

1. Thread Antenna into Remote Control.



Figure B

<u>CAUTION!</u> Position batteries in proper polarity and do not install batteries of different types, charge, levels, or capacities together.

- 2. Remove Battery Cover on back of Remote Control.
- 3. Insert six AA batteries (sold separately).
- 4. Replace Battery Cover.

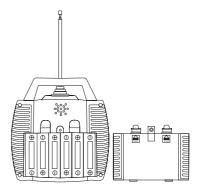


Figure C

Components and Controls



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this document including all text under subheadings therein before set up or use.

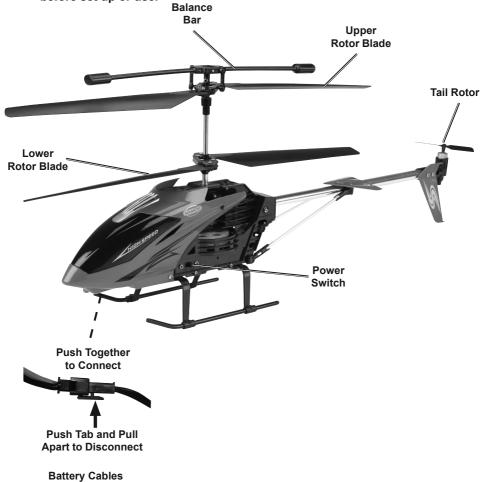
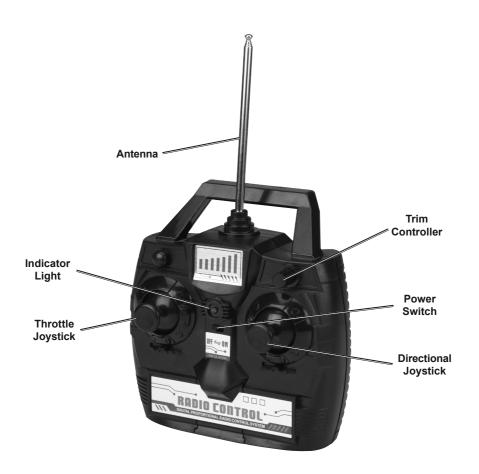


Figure D: Helicopter



FUNCTIONS				
UP	Throttle Joystick Up			
DOWN	Throttle Joystick Down			
FORWARD	Directional Joystick Up			
BACKWARD	Directional Joystick Down			
LEFT	Directional Joystick Left			
RIGHT	Directional Joystick Right			

Figure E: Remote Control

Operating Instructions



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this document including all text under subheadings therein before set up or use of this product.

AWARNING

TO PREVENT SERIOUS INJURY:

Operator and spectators must wear ANSI-approved safety goggles during use. Keep Helicopter within 50 feet of Remote Control. If Helicopter goes out of range, it will stop working and fall.

<u>WARNING!</u> To prevent serious injury, avoid sudden movements of controls while flying.

<u>CAUTION!</u> Only fly outdoors during daylight hours in an area with no obstructions, power lines, vehicles, animals or people nearby.

 Turn Remote Control ON, Indicator Light will flash. Push Throttle all the way up, then all the way down. When Indicator Light stops flashing, Remote Control is transmitting.

CAUTION! If Remote Control's Indicator Light does not stop flashing, replace its batteries.

2. Connect Helicopter's Battery Cables.



- 3. Lay Helicopter down on level surface.
- Turn Helicopter Power Switch ON.
- 5. Position Helicopter with its tail toward you, then stand 10 feet away.
- Pull Remote Control's Antenna all the way out.

CAUTION! If the Remote Control's Indicator Light flashes during flight, land the helicopter safely, and replace the batteries before further use.

- When finished, turn Remote Control OFF, then turn Helicopter OFF and disconnect battery cables.
- Clean and store according to "Inspection and Maintenance" on page 12.

Checking Trim

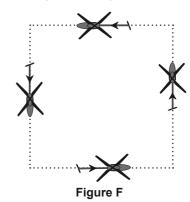
- Using a light touch, slowly push Throttle up until Helicopter is barely hovering. Helicopter should stay in one place without excessive rotation.
- a. If Helicopter rotates to left, turn Trim Controller slowly to right until Helicopter stops rotating.
- b. If Helicopter rotates to right, turn Trim Controller slowly to left until Helicopter stops rotating.

Practicing

NOTICE: To avoid damage to the Helicopter, keep Helicopter between 1-3 feet off the ground while practicing. Master each step before going on to the next one.

- 1. **Taking Off:** Slowly raise the Throttle until Helicopter rises off the ground.
- 2. **Hovering:** Practice keeping the Helicopter as motionless as possible in the following 4 positions:
 - a. Tail facing you.
 - b. Left side facing you.
 - c. Nose facing you.
 - d. Right side facing you.
- 3. Landing: Slowly lower Throttle until Helicopter almost touches the ground. Ease off Throttle slightly to avoid bouncing, then lower all the way.
- Forward/Backward: Practice moving forward and backward in the following 4 positions:
 - a. Tail facing you.
 - b. Left side facing you.
 - c. Nose facing you.
 - d. Right side facing you.
- 5. **Left/Right:** Practice moving to the left and right in the following 4 positions:
 - a. Tail facing you.
 - b. Left side facing you.
 - c. Nose facing you.
 - d. Right side facing you.

6. **Box:** Practice flying a box pattern, stopping and turning at each corner.



- Circle: Practice flying in a circle with the Helicopter in the following 4 positions:
 - a. Tail facing you.
 - b. Left side facing you.
 - c. Nose facing you.
 - d. Right side facing you.

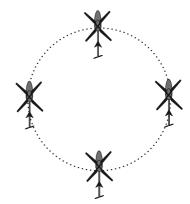


Figure G: Tail Facing You

Inspection and Maintenance



Procedures not specifically explained in this manual must be performed only by a qualified technician.

AWARNING

TO PREVENT SERIOUS INJURY FROM ELECTRICAL SHOCK:

Make sure that the Helicopter is OFF before performing any procedure in this section.

Inspection

- BEFORE EACH USE, inspect the general condition of the Helicopter. Check for:
 - · stripped gears,

- · bent main shaft,
- · cracked or broken rotors, and
- any other condition that may affect its safe operation.

Cleaning and Storage

- AFTER USE, use a mild detergent on a clean cloth to remove any dirt from the Helicopter.
- Remove batteries from Remote Control, then store the Helicopter, and accessories in a dry area away from direct sunlight and out of the reach of children.

Replacing Rotors

Main

1. Remove 3 screws holding the Rotor in place.



Figure H

2. Gently lift up Tab holding Rotor onto Shaft. Lift Rotor off Shaft and remove.

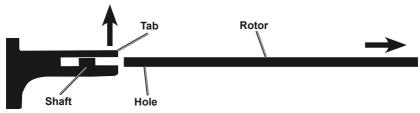
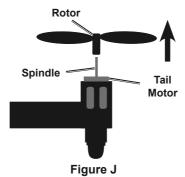


Figure I: Side View

3. Replace Rotor and 3 screws, tighten screws enough so that Rotor can move freely.

Tail

1. Gently pull up on Rotor until it comes off its Spindle.



2. Replace Rotor, making sure that Tail Motor is firmly seated in place.

Troubleshooting

Problem		Possible Causes Likely Solutions		Likely Solutions
Helicopter won't work or moves slowly.	1.	Helicopter battery needs to be charged.	1.	Charge Helicopter battery.
	2.	Remote Control needs new batteries.	2.	Replace Remote Control batteries.
	3.	Remote Control antenna not fully extended.	3.	Extend Remote Control antenna fully.
	4.	Radio Interference.	4.	Move to another location.
Helicopter rotates left or right.	1.	Trim needs adjustment.	1.	Adjust Trim Controller in opposite direction of spin.
	2.	Potentiometer needs adjustment	2.	Have qualified technician adjust potentiometer.
Cannot control Helicopter.	1.	Wind too strong.	1.	Wait for wind to stop.
	2.	Helicopter out of range.	2.	Only operate within range.
	3.	Main Rotors installed incorrectly.	3.	Install MainRotors correctly.



Follow all safety precautions whenever diagnosing or servicing the Helicopter.

Turn off Switches on Helicopter and Remote Control before service.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST IN THIS DOCUMENT AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List

Part	Description	Qty
1	Helicopter	1
2	Remote Control	1
3	Upper Rotor	3
4	Lower Rotor	3
5	Tail Rotor	3
6	Linkage	1

Record Serial Number Here:

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.