

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 (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.

19g

4.5 CHANNEL

Pocket Air Drone ***QUADCOPTER***



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

56253

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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⚠ WARNING

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

Important Safety Information

1. **Do not allow children younger than age 8 to use this Quadcopter.** Children should not operate without adult supervision.
2. Only fly outdoors during daylight hours in an area with no obstructions, power lines, vehicles, animals or people nearby.
3. **Do not fly in wet or windy conditions.**
4. **Keep spectators and pets away. Spectators should only watch from a safe distance.**
5. **Position remote control batteries in proper polarity.** Do not mix old and new batteries. Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries. Do not use swollen or leaking batteries.
6. **Do not open the housing or modify its design.** Doing so may cause damage and/or make it dangerous.
7. **Do not use if parts are loose or damaged.** If the toy has been damaged, immediately stop using it.
8. Contains Lithium-Polymer battery. Battery must be recycled or disposed of properly. Do not open, crush, heat above 140° F or incinerate.
9. 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.

Lithium Battery Charging Safety

1. Do not leave Quadcopter unattended while charging.
2. Battery charging should be done by adults only.
3. Use the supplied USB charging cable only.
4. Charge on non-flammable surface and keep away from flammable items.
5. If battery-powered device has been damaged, immediately stop use, unplug, and safely move away from flammable materials.
6. Follow instructions for charging battery. DO NOT charge longer than recommended.
7. Allow a clearance of at least 4" on all sides during charging.

Personal Safety

1. **Operator and spectators must wear ANSI-approved safety goggles during use.**
2. 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.
3. Do not use the Quadcopter while tired or under the influence of drugs, alcohol, or medications. A moment of interruption can result in serious personal injury.



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.

Warning! Any changes or modifications not expressly approved by the party responsible for compliance 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 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 to 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 Customer Service or an experienced radio/TV technician for help.

FCC ID: 2AK3Z-201901

The responsible party in the United States for compliance of the equipment is:

Harbor Freight Tools, 26541 Agoura Road, Calabasas, CA 91302
1-888-866-5797 • <http://www.harborfreight.com>

Set Up



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

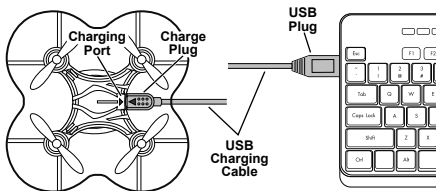
WARNING

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

Charging Battery

CAUTION! Do not leave Quadcopter unattended while charging. Battery charging should be done by adults only.

1. Make sure Quadcopter and Remote Control are turned OFF.
2. Plug the USB plug on the Charging Cable into the USB port of a computer or any other USB power source.
3. Insert Charge Plug on the Charging Cable into the Charging Port on the Quadcopter with the triangle marking on the Charge Plug facing up as shown below.
4. While Battery is charging, LED light on USB plug is off. When fully charged, LED light comes on. Charging takes approximately 20–25 minutes.
5. When charging is complete, disconnect Charging Cable from Quadcopter and power source.

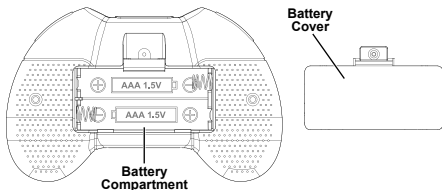


Remote Control

1. Remove the screw securing the Battery Cover on the back of the Remote Control.
2. Remove the Battery Cover and insert two AAA batteries (sold separately) in the indicated polarity.

3. Replace Battery Cover and tighten screw securely.

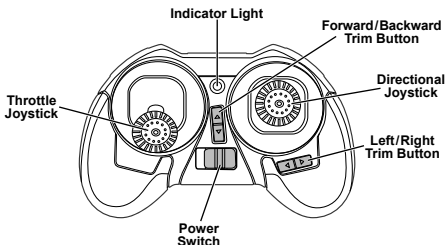
CAUTION! Do not mix old and new batteries. Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries. Position batteries in proper polarity. Do not use swollen or leaking batteries.



Specifications

Remote Control Battery Type	2-AAA (sold separately)
Quadcopter Battery Type	3.7V / 100mAh rechargeable Lithium-Polymer
Battery Charging Time	20-25 minutes
Flying Time	Approximately 3.5-4 minutes
Range	Up to 80 feet
Operating Frequency	2.4 GHz

Controls



FUNCTIONS

UP	Throttle Joystick Up
DOWN	Throttle Joystick Down
FORWARD	Directional Joystick Up
BACKWARD	Directional Joystick Down
TURN LEFT	Throttle Joystick Left
TURN RIGHT	Throttle Joystick Right
MOVE LEFT	Directional Joystick Left
MOVE RIGHT	Directional Joystick Right
TRIM FORWARD MOVEMENT See page 9	Forward/Backward Trim Button Down Arrow
TRIM BACKWARD MOVEMENT See page 9	Forward/Backward Trim Button Up Arrow
TRIM MOVEMENT TO LEFT See page 9	Left/Right Trim Button Right Arrow
TRIM MOVEMENT TO RIGHT See page 9	Left/Right Trim Button Left Arrow

Operating Instructions



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

⚠️WARNING TO PREVENT SERIOUS INJURY: Operator and spectators must wear ANSI-approved safety goggles during use. Keep Quadcopter within 80 feet of Remote Control. If Quadcopter goes out of range, it will stop working and fall.

WARNING! To prevent serious injury, avoid sudden movements of controls while flying.

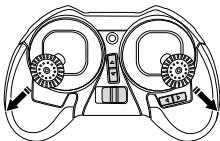
CAUTION! Only fly outdoors during daylight hours in an area with no obstructions, power lines, vehicles, animals or people nearby.

Pairing

1. Turn the Quadcopter ON—the red and blue LED lights will flash. Place the Quadcopter on a flat surface.
2. Turn Remote Control ON. Unit will beep once and Indicator Light will flash.
3. Push Throttle all the way up, the unit will beep once. Then push Throttle all the way down until unit beeps again.
4. The Indicator Light on the Remote will now stay on, indicating the Quadcopter and Remote are paired.

Calibrating Gyroscope

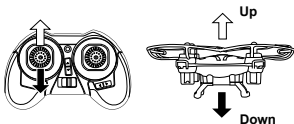
1. When pairing is complete, place Quadcopter on a flat surface. Simultaneously pull the Throttle stick diagonally to the left lowest position and the Directional stick diagonally to the right lowest position until the Quadcopter's LED lights flash.
2. Release the Throttle and Directional sticks. The LED lights stop flashing when calibration is complete.



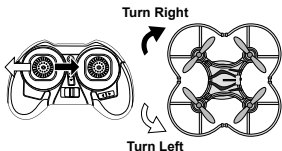
Calibrating Gyroscope

Basic Operation

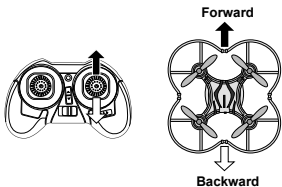
1. To maneuver the Quadcopter up or down, move the Throttle Joystick up or down.



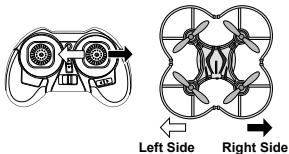
2. To turn the Quadcopter left or right, move the Throttle Joystick to the left or right.



3. To move the Quadcopter forward or backward, push the Directional Joystick up to go forward or pull it down to go back.



4. To move the Quadcopter left or right from side to side, push the Directional Joystick left or right.



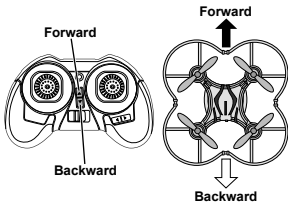
Speed Control

Quadcopter speed is set to normal by default. To change to medium speed, press the Throttle Joystick once—the Remote will beep twice indicating speed is set. For high speed press the Throttle Joystick again—the Remote will beep three times indicating speed is set. To return to normal speed press the Throttle Joystick once—the Remote will beep once indicating speed is reset to normal.

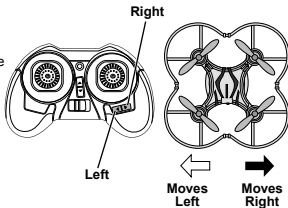
Checking Trim

Using a light touch, slowly push Throttle up until Quadcopter is barely hovering. Quadcopter should stay in one place without excessive forward, backward, or side to side movement or rotation. If any of these conditions occur make adjustments using the following procedures.

1. If the Quadcopter moves forward, press the Backward arrow on the Forward/Backward Trim Button to adjust. If it moves backward, press the Forward arrow.



2. If Quadcopter moves to the right, press the Left arrow on the Left/Right Trim Button to adjust. If it moves to the left, press the Right arrow.

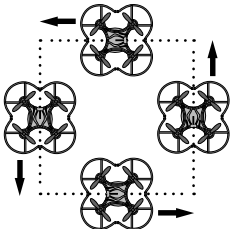


Practicing

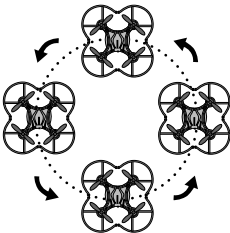
NOTICE: To avoid damage to the Quadcopter, keep Quadcopter between 1-3 feet off the ground while practicing. Master each step before going on to the next one.

- 1. Taking Off:** Slowly raise the Throttle until Quadcopter rises off the ground.
- 2. Hovering:** Practice keeping the Quadcopter 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 Quadcopter almost touches the ground. Ease off Throttle slightly to avoid bouncing, then lower all the way.
- 4. 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.



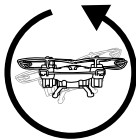
- 7. Circle:** Practice flying in a circle with the Quadcopter in the following 4 positions:
 - a. Tail facing you.
 - b. Left side facing you.
 - c. Nose facing you.
 - d. Right side facing you.



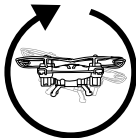
360 Degree Flips

To enter flip mode, press down on the Directional Joystick until it clicks and then release. The Remote will beep intermittently indicating flip mode. Remote stops beeping when the flip is complete. Keep Quadcopter at least 5 feet off the ground when performing flips.

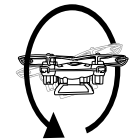
1. For a left 360-degree flip, push the Directional Joystick to the left.



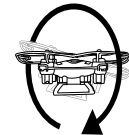
2. For a right 360-degree flip, push the Directional Joystick to the right.



3. For a forward 360-degree flip, push the Directional Joystick up.



4. For a backward 360-degree flip, pull the Directional Joystick down.



Maintenance



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

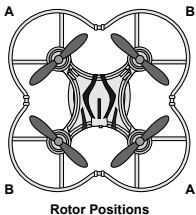
⚠️WARNING

TO PREVENT SERIOUS INJURY FROM ELECTRICAL SHOCK:
Switch the Remote Control **OFF** and unplug the Battery from the Quadcopter before performing any procedure in this section.

1. **BEFORE EACH USE**, inspect the general condition of the Quadcopter. Check for:
 - loose, misaligned body shell
 - bent motor shafts
 - cracked or broken rotors
 - any other condition that may affect its safe operation.
2. **AFTER USE**, use a mild detergent on a clean cloth to remove any dirt from the Quadcopter.
3. Contains Lithium-Polymer battery. Battery must be recycled or disposed of properly. Do not open, crush, heat above 140° F or incinerate.
4. Remove batteries from Remote Control, then store the Quadcopter and accessories in a dry area away from direct sunlight and out of the reach of children.

Replacing Rotors

1. For the Quadcopter to operate properly, the Rotors must be installed in designated locations as shown. Rotors are marked A or B on the tops of the blades.
2. Place the Rotor on the motor shaft and press down firmly to lock. Make sure the correct Rotors are being installed in the correct locations. Take care not to damage or deform the blades when applying pressure.



PLEASE READ THE FOLLOWING CAREFULLY

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Parts List

Part	Description	Qty
1	Quadcopter	1
2	Remote Control	1
3	USB Charging Cable	1
4	Spare Rotor	4

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.