



STORM LAUNCHER



INSTRUCTIONS



Check to make sure contents are complete:

- 1 Air Hogs® Storm Launcher™
- 1 Controller
- 2 Spare propellers (1 left and 1 right)
- 1 Instruction manual
- 1 Wind streamer and buckle.
- 1 Propeller installation and removal tool

Required:

- 6 AA alkaline batteries for the controller (not included)
- Air Hogs® LiPo Power Pack™ battery and charger (sold separately)

IMPORTANT

Before you take Storm Launcher™ out for a spin, read these instructions. This is a Pro Series Air Hog® R/C; it will take practice to master it. Take to a BIG open space with no obstacles and get used to playing with it on the ground, before attempting to fly it.

Go to www.airhogs.com and try the Storm Launcher™ flight tips and simulator. Insufficient practice, training and understanding of these instruction sheets will raise the potential for damaging crashes.

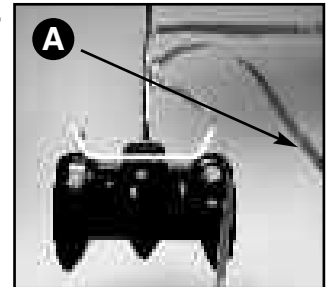
CONTROLLER BATTERY INSTALLATION

1. Use a screwdriver to remove the battery door retaining screw on the back of the controller. Remove the battery door.
2. Install six AA alkaline batteries (not included) in the battery compartment. Be careful to align the positive (+) and negative (-) polarities with the corresponding markings inside the battery compartment.
3. Reinstall the battery door.



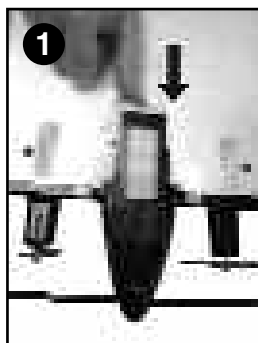
PRE-USE ENVIRONMENT CHECK

Storm Launcher™ is a very fast, very responsive R/C. To avoid crashing, practice in a wide open area on a calm to light windy day. Check the streamer on the controller antenna for wind conditions. If the streamer rises above position **A**, do not fly Storm Launcher™.



FLIGHT PREPARATION

1. Insert a fully charged battery into the battery compartment underneath the front of the Storm Launcher™. Pay particular attention to its orientation as it will properly lock into position only if inserted correctly. Make sure the battery is FULLY INSERTED. When your Storm Launcher™ is new, the battery fit is tight.
2. Extend the controller antenna fully. The antenna can be tilted (forward and back) for comfort.
3. Slide the controller's power switch to the "ON" position.
4. The "ON" switch for the Storm Launcher™ is electronic. To Turn the Storm Launcher™ "ON", lower the throttle control fully and depress the activation button for 5 continuous seconds. After approximately 3 seconds, the Storm Launcher's™ propellers will briefly spin – indicating that the Storm Launcher™ is now "ON". To turn your Storm Launcher™ "OFF", lower the throttle control fully and depress the activation button for 4 continuous seconds – or simply slide the controller's power switch to "OFF".
5. **IMPORTANT:** Your Storm Launcher™ must be trimmed BEFORE FLYING!



Performance Tip! If you run the Storm Launcher™ only on the ground for the first few charges at lower speed, your motors will become conditioned and give optimum performance.

FLIGHT PREPARATION CONTINUED

1. The elevator on the back of the Storm Launcher™ must be centered or trimmed. The trim control for the elevator is on the left-hand side of the right controller stick. Move the trimmer up and down to adjust the elevator DOWN and UP respectively. **NOTE:** With the propeller guards installed, the elevator should be trimmed so the position or angle of the elevator is flat and inline with the center body of the Storm Launcher™. With the propeller guards removed, the elevator should be trimmed with an angle that is slightly up as compared to the center body of the Storm Launcher™.
2. The motors may need to be trimmed for straight-ahead operation. The trim control for steering is below the right controller stick. Place the Storm Launcher™ with a charged battery in it on a smooth surface (concrete driveway or sidewalk recommended). Turn the Storm Launcher™ "ON". Advance the throttle lever slowly until the Storm Launcher™ begins to move. Notice if the Storm Launcher™ is moving to either the right, left or straight. If the Storm Launcher™ seems to consistently turn right, move the trim control to the left until the Storm Launcher™ is moving straight. If the Storm Launcher™ seems to be consistently turning left, then move the trim control until the Storm Launcher™ is moving straight.
3. You may need to trim the Storm Launcher™ while in-flight for optimal performance. If you notice that your Storm Launcher always wants to climb with the elevator control stick centered, or that it is consistently flying in a "Nose-up" attitude, then move the elevator trim controller "UP". This decreases the angle of the elevator and neutralizes the climbing or nose-up flight tendencies. Likewise, if you notice that your Storm Launcher™ dives or continuously descends with the elevator control stick centered, move the elevator trim controller "DOWN". This increases the angle of the elevator and neutralizes the diving or descending flight tendencies.



WARNING: STORM LAUNCHER™ IS EQUIPPED WITH VERY POWERFUL MOTORS. ALWAYS STAY CLEAR OF THE SPINNING PROPELLERS.

DRIVING YOUR STORM LAUNCHER™

NOTE: Flying your Storm Launcher™ is very much like flying a hobby grade R/C airplane. The controls are proportional, meaning if you move the control sticks a little or a lot – the Storm Launcher™ will react a little or a lot! It does take some practice and patience to learn to proficiently fly your Storm Launcher™.

Your Storm Launcher™ is capable of operating on the ground, like a car or on water like a boat! Both terrains require the same control inputs.

1. To go straight-ahead, gently advance the left controller stick (THROTTLE) until the Storm Launcher™ is moving at a comfortable speed.
2. Steer the Storm Launcher™ by moving the right controller stick (DIRECTIONAL) right or left. Do not move the right controller stick fore or aft if you wish to operate on the ground.

NOTE: On the ground, you will find the best control is in the Expert Mode setting.

To make the learning process easier, Air Hogs® has incorporated a Skill Setting switch. When you first unpack your Storm Launcher™, the skill setting switch is factory set to the gentler Novice Flying Mode. When in Novice Mode, the green LED next to the switch will illuminate. When in Expert Mode, the

WARNING: If you fly Storm Launcher™ in Expert Mode, a mistake can result in a crash. Turning the steering control to the far left, in Novice Mode will result in a wide turn, in Expert Mode, the same control input will result in a downward spiral.



red LED will illuminate. You will immediately notice the more immediate and crisp flight characteristics or Feel of the Expert Mode, so please be careful with the stick inputs until you feel completely proficient and comfortable with the Storm Launcher™ in this setting.

TAKING OFF

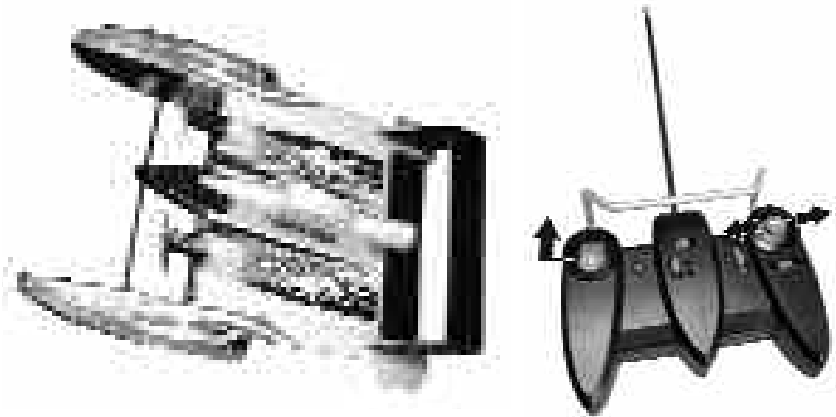
In an open field, off of water or off a paved surface, slowly advance the throttle control to full power. Steer the Storm Launcher™, keeping it straight and into the wind, using the right controller stick. When the Storm Launcher™ has built-up speed, gently pull back on the right controller stick. Your Storm Launcher™ will rise off the ground and fly while continuing to accelerate. You may need to reduce the throttle lever to keep the Storm Launcher™ at a comfortable speed. Always use gentle stick movements, especially the up/down controls. Never give the Storm Launcher™ full up commands when its airspeed is too low (like during take-off) as it will likely stall and fall to the ground. Smooth and small inputs are best! **NOTE:** Taking off from long grass may not be possible. You may need to give Storm Launcher™ a small push to get it going on grass. Never fly over water you cannot retrieve Storm Launcher™ from should it crash land. Never swim out to retrieve Storm Launcher™ without parental supervision.



FLYING AROUND

After take-off, the right controller stick will also control the right and left directions of the Storm Launcher™. Again, smooth and small inputs are ideal! Due to the aerodynamic nature of the Storm Launcher™ and depending on the wind conditions, when you command the Storm Launcher™ to go left or right, you will probably have to give it a small amount of "UP" command to keep it from descending. This is normal and will take some practice to perfect. Try some right turns, left turns, figure-8's, and flying circles. Also add and reduce throttle to see how your Storm Launcher™ reacts to various power settings. These maneuvers will ensure your learning stages are fun and rewarding.

Make sure to get comfortable performing basic moves before you graduate to pro series stunts.



LANDING

Determine where you will need to land your Storm Launcher™ and fly it so it will be landing into the wind (the same direction as during your take-off). You may need to make a couple of fly-by's on the landing zone to determine if your airspeed is too fast. When ready to land, gently reduce the throttle while continuing to steer and make altitude corrections with the right controller stick. The Storm Launcher™ will begin to descend. When you are lined-up with your runway, continue to gently reduce the throttle. If you are descending too quickly, give it more throttle. At about 1 foot off the ground, completely reduce the throttle and give the Storm Launcher™ a small amount of "UP" command. Your Storm Launcher™ will flare, slightly nose high, and settle nicely onto the ground or water. If your Storm Launcher™ has "Landed Long" or is far away after the landing, simply drive it back to yourself.

ELEVATOR CONTROL:

Elevator control directs the Storm Launcher™ angle of attack. Pulling back on the control will result in the Storm Launcher™ pointing upwards. Even though the Storm Launcher™ is pointing up, that does not always mean the Storm Launcher™ is flying upwards. Full throttle and full elevator can result in a high alpha slow flight, or even a vertical stall. Both can be good tricks under the control of a good pilot, but both typically mean an end to the flight sooner than planned to a novice. The key with elevator control is light and gradual inputs. Maximum inputs will more often result in crashes than slow controlled inputs.

PROPELLER GUARDS:

Storm Launcher™ comes equipped with propeller guards to protect the propellers and YOUR FINGERS! These guards can be removed for increased flight time and better stunt performance. Remove the battery before attempting to remove propeller guards. Only an adult should attempt to remove the propeller guards. ALWAYS KEEP HANDS AWAY FROM THE PROPELLERS, EVEN WHEN THE UNIT IS TURNED OFF.

To remove the guards, remove the screws and unclip the guards as shown. Slide the guards up and off without removing the propeller. Re-install the screws in the motor mount when finished.



REPAIRS

IF you do crash your Storm Launcher™ and some of the foam breaks, don't worry, most basic repairs can be done at home.

1. To replace the propellers, gently pry the broken prop off the motor shaft with a pair of thin nosed pliers or tool provided.
NOTE: The twist of the propeller blades as there is a right and left propeller.
2. Clear packaging tape can be used to repair most cracks or breaks in the foam.



TROUBLESHOOTING

| PROBLEM | SOLUTION |
|--|--|
| Storm Launcher™ does not turn on. | <ol style="list-style-type: none"> 1. Ensure the Battery is properly and fully inserted into the Storm Launcher™ and it is fully charged. 2. Ensure fresh alkaline batteries are properly installed in the controller and it is "ON". 3. Ensure the throttle control stick is fully down or "OFF" and you have depressed the activate button for 5 continuous seconds. 4. Re-read instructions. Turn controller off. Remove battery from Storm Launcher™. Re-install battery in Storm Launcher™ and turn controller on again. Place Storm Launcher™ on the ground 4 feet away from any person or obstacle. Press and hold the activation button until one or both of the propellers spin. NOTE: To test that the Storm Launcher™ is receiving the signal from the controller, move the elevator control up and down and check for a response. If it does not move, change the "AA" batteries in the controller. |
| Storm Launcher™ does not fly/drive straight or climbs or dives. | <ol style="list-style-type: none"> 1. Refer to the Flight Preparation section your Storm Launcher™ section. 2. Inspect the propellers for damage. Replace broken propeller. |
| Storm Launcher™ flies very low and slowly, even with full throttle and full up elevator. | <ol style="list-style-type: none"> 1. Read instructions again and practice. Full Throttle and Full Elevator at the same time, will result in a high alpha slow flight. To climb, use full throttle combined with minimal, elevator up inputs. Make sure the Air hogs® LiPo Power Pack™ is fully charged. |

CONTROLLER BATTERY INFORMATION

- Battery installation should be performed by an adult.
- Be careful to install batteries with correct polarity as indicated.
- Do not mix new and old batteries.
- Do not mix alkaline, standard, rechargeable or different types of batteries.
- Different types of batteries or new and used batteries are not to be mixed.
- Exhausted batteries are not to be removed from the toy.
- Non-rechargeable batteries are not to be recharged.
- Rechargeable batteries are only to be charged under adult supervision (if removable).
- Rechargeable batteries are to be removed from the toy before being charged (if removable).
- Only batteries of the same or equivalent type as recommended are to be used.
- The supply terminals are not to be short-circuited.
- Do not dispose of batteries in fire. Battery may explode or leak.

IMPORTANT BATTERY INFORMATION

- Only use the Air Hogs® 7.4V LiPo pack in designated Air Hogs® toys.
- Charge the Air Hogs® 7.4V LiPo battery only with the provided Air Hogs® Lithium Polymer Charger.
- The Air Hogs® 7.4V Lithium Polymer Battery, Charger docking station and wall charger are not toy.
- Charging operation should be performed by adults only.
- The newly purchased Air Hogs® 7.4V 740mAh Lithium Polymer Pack is only partially charged. Full charge the LiPo battery pack before first use.
- Always fully charge the LiPo battery pack in repeat use.
- The supply terminals are not to be short-circuited.
- Do not use the battery with the positive and negative terminals reversed.
- Do not attempt to open, disassemble or short-circuit the LiPo battery pack.
- Stop using and do not recharge the LiPo battery pack that shows leakage, damage or deformation.
- Do not allow the LiPo battery pack to get wet.
- Always store the LiPo battery pack in cool and dry place.
- Dispose of LiPo battery pack properly and never dispose of LiPo battery pack in fire.
- Do not recharge the LiPo battery pack immediately after use. Wait until it is cool before charging.
- Be sure the wall charger, docking station and LiPo battery are kept out of the hands of infants and small children.
- Do not charge near fire, where temperature is extremely high (flammable item), or where it is wet or damp.
- Do not leave the battery in direct sunlight.
- DO NOT continue to charge the LiPo battery if the charger fails to recognize full charge. Overheating or swelling of the LiPo cells is an indicator that they are in an overcharged condition, and the batteries should be disconnected from the charger immediately!
- DO NOT allow LiPo pack to overheat at any time! Cells which reach greater than 140°F (60°C) can and USUALLY WILL become damaged physically and could possibly catch FIRE! Always inspect a battery which has previously overheated for potential damaged, and do not re-use if you suspect it has been damaged in any way.
- DO NOT allow LiPo batteries to be charged or discharged on or near combustible materials, including paper, plastic, carpets, vinyl, leather, wood, inside an R/C model or full-sized automobile!
- ALWAYS provide adequate ventilation around LiPo batteries during charge, discharge, while in use and during storage. If a battery becomes overheated, remove it from the charger IMMEDIATELY and place it in a fire-proof location until it cools.
- DO NOT modify the Air Hogs® LiPo battery pack in any ways which might result in permanent damage or dangerous responses.
- IMMEDIATELY remove a LiPo battery from a model if it is involved in a crash in any way. Do not use a LiPo battery if you suspect physical damage has occurred to the pack. Carefully inspect the battery for even the smallest of dents, cracks, splits, punctures or damages. A LiPo battery might not appear to be damaged after a crash, but it could smolder over a short amount of time and suddenly catch fire unexpectedly. In doubt, place the battery in a fire-proof location indefinitely.

CAUTION: STORM LAUNCHER™ USES AIR HOGS® LIPO POWER PACK™ (SOLD SEPARATELY)

⚠ WARNING: Lithium Polymer (LiPo) batteries are very different from other types of batteries and must be handled and disposed of properly. Please refer to and read the included care and handling instructions for this part.

FCC REQUIREMENTS

This device complies with FCC part 95 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 not expressly approved by the party responsible for its compliance could void the user's authority to operate the equipment.

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Item #14171
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14171-ENG-IS-3
REV 3 US English

Contains LiPo battery pack.
Battery pack must be recycled or disposed of properly.

