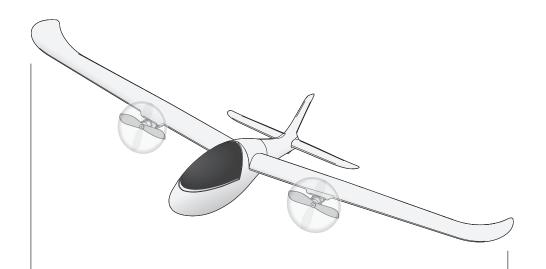
# **ASCENT™ MTX**

Instruction Manual • Bedienungsanleitung • Manuel d'utilisation • Manuale di Istruzioni







#### NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, LLC. For up-to-date product literature, visit www.horizonhobby.com and click on the support tab for this product.

#### **Meaning of Special Language:**

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

**NOTICE:** Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.

**CAUTION:** Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

**WARNING:** Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

WARNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

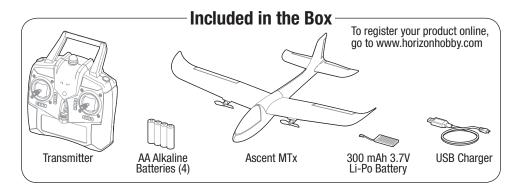
This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by Horizon Hobby, LLC. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

Age Recommendation: Not for children under 14 years. This is not a toy.

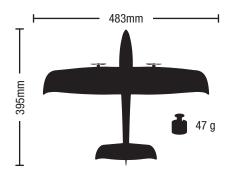
### **Safety Precautions and Warnings**

- Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.
- Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to electronics.

- Never place any portion of the model in your mouth as it could cause serious injury or even death.
- Never operate your model with low transmitter batteries.
- Always keep aircraft in sight and under control.
- Always use fully charged batteries.
- Always keep the transmitter powered on while aircraft is powered.
- Always remove batteries before disassembly.
- Always keep moving parts clean.
- Always keep parts dry.
- Always let parts cool after use before touching.
- · Always remove batteries after use.
- Always ensure failsafe is properly set before flying.
- Never operate aircraft with damaged wiring.
- · Never touch moving parts.



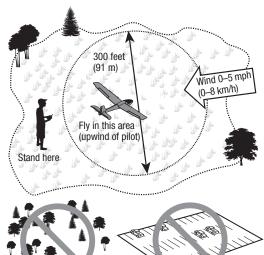
# **Specifications**



# **Preflight Checklist**

✓		
	1.	Find a safe and open area.
	2.	Charge flight battery.
	3.	Install flight battery in aircraft.
	4.	Perform Control Test.
	5.	Plan flight for flying field conditions.
	6.	Set a flight timer for 10 minutes.
	7.	Have fun!

## **Flying Tips**



- Consult local laws and ordinances before choosing a location to fly your aircraft.
- Fly your aircraft outside in no greater than light winds.
- For indoor flight, fly the aircraft inside in a large gymnasium
- Keep your aircraft in plain sight and up wind.
  Do not exceed the 300 foot (91 m) radio
  range. If the connection is lost, the motors
  will power off and the aircraft will descend.
  Leave your transmitter powered on and move
  closer to your aircraft to regain control.
- Always avoid flying near houses, trees, wires and buildings.
- Always avoid flying in areas where there are many people, such as busy parks, schoolyards or soccer fields.

### **Transmitter**

A: Throttle

B: Handle

C: Antenna

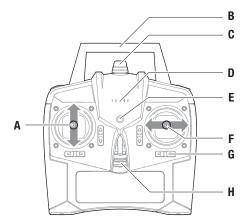
D: Speaker

E: LED

F: Steering

G: Steering Trim

H: Power Switch



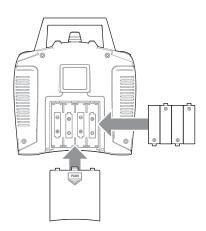
### **Transmitter Batteries Installation**

Remove the battery cover, install the four included AA batteries (noting proper polarity) and reinstall the battery cover.

CAUTION: If using rechargeable batteries, charge only rechargeable batteries.

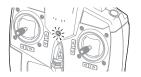
Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.

CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to national regulations.



#### **Low Battery Alarm**

When the transmitter battery voltage drops too low, an alarm sounds and the LED flashes. The batteries must be replaced immediately. If this happens while flying, land your aircraft as soon and as safely as possible.



### **Charging Warnings**

The USB charger has been designed to safely charge the included Li-Po battery.

CAUTION: All instructions and warnings must be followed exactly. Mishandling of Li-Po batteries can result in a fire, personal injury and/or property damage.

- NEVER LEAVE CHARGING BATTERIES UNATTENDED
- NEVER CHARGE BATTERIES OVERNIGHT
- By handling, charging or using the included Li-Po battery, you assume all risks associated with lithium batteries.
- If at any time the battery begins to balloon or swell, discontinue use immediately. If charging or discharging, discontinue and disconnect. Continuing to use, charge or discharge a battery that is ballooning or swelling can result in fire.
- Always store the battery at room temperature in a dry area for best results.
- Always transport or temporarily store the battery in a temperature range of 40–120° F. Do not store the battery or model in a car or direct sunlight. If stored in a hot car, the battery can be damaged or even catch fire.

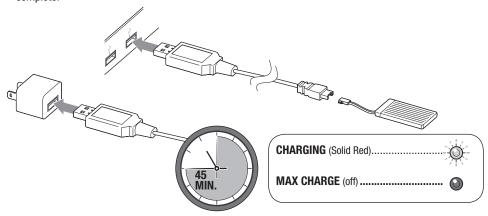
- Always charge batteries away from flammable materials.
- Always inspect the battery before charging.
- Always disconnect the battery after charging, and let the charger cool between charges.
- Always constantly monitor the temperature of the battery pack while charging.
- ONLY USE A CHARGER SPECIFICALLY DESIGNED TO CHARGE LI-PO BATTERIES. Failure to charge the battery with a compatible charger may cause a fire resulting in personal injury and/or property damage.
- Never discharge Li-Po cells to below 3V under load.
- Never cover warning labels with hook and loop strips.
- Never charge batteries outside recommended levels.
- · Never charge damaged batteries.
- · Never attempt to dismantle or alter the charger.
- Never allow minors to charge battery packs.
- Never charge batteries in extremely hot or cold places (recommended between 40–120° F or 5–49° C) or place in direct sunlight.

# **Charging the Flight Battery**

- Connect the Li-Po battery to the included USB charger.
- Connect the USB charger to a phone USB charge adapter (not included) or into any powered USB port.
- The LED on the charger will glow solid red while charging and will turn off when charging is complete.

Always charge the aircraft battery before flying.

CAUTION: Do not store the Li-Po battery in the charger. Doing so could over-discharge the Li-Po battery.

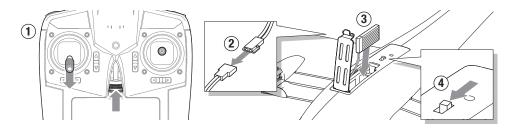


### **Installing the Flight Battery**

- Make sure the throttle is in the off position and turn on the transmitter.
- 2. Open the battery hatch on the bottom of the aircraft and plug in the flight battery.
- Install the flight battery into the aircraft as shown and close the hatch.
- 4. Power on the aircraft.

CAUTION: Always disconnect the flight battery from the aircraft when not flying to avoid over-discharging the battery. Batteries discharged to a voltage lower than the lowest approved voltage may become damaged, resulting in loss of performance and potential fire when batteries are charged.

**CAUTION:** Keep away from the propellers.



### **Control Test**

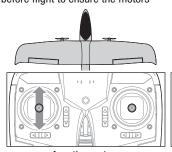
**CAUTION:** Keep away from the propellers, they will spin up during the control test.

The Ascent™ MTx aircraft relies on motor thrust to climb, descend and turn. Always perform a control test before flight to ensure the motors are working properly.

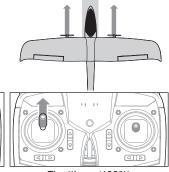
- Turn the aircraft on as shown above.
- 2. Turn the transmitter on.
- 3. Hold the aircraft so it does not escape your control.
- 4. Arm the motors by first moving the left stick to 100% and then back down to 0%.
- 5. Move the sticks on the transmitter to ensure the motors respond as shown.

**Tip:** To check the Left and Right turn, keep the throttle at 0% and note which motor spins.

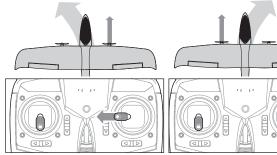
If the motors do not react as shown, refer to the Binding instructions and Troubleshooting Guide in this manual.



Arm the motors



Throttle on (100%)



Turn Left/ Right motor spins

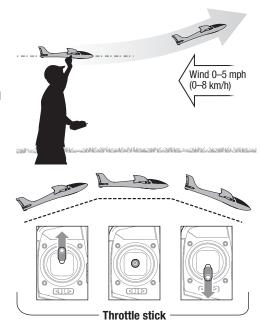
Turn Right/ Left motor spins

# **Flying**

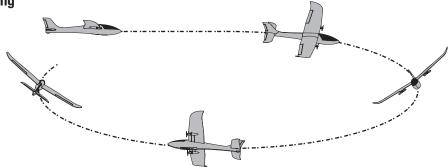
#### **Taking Off**

Get help to hand launch your aircraft so you can concentrate on flying. If you must hand launch the aircraft alone, hold the model in your dominant hand and the transmitter in your other hand.

- 1. Face into the wind and apply 1/2 (50%) throttle.
- 2. Hold the plane horizontal and launch straight and level into the wind.
- 3. The aircraft will climb under full throttle (100%).
- 4. Reduce to 50% throttle once the plane is at a safe altitude (50-75 feet) to level out.
- 5. Use the throttle to control altitude.



#### **Turning**



To turn the aircraft make small controlled movements with the right stick.

For a right hand turn:

- 1. Move the right stick slowly to the right.
- Once the turn begins, add in a little throttle to maintain altitude.
- 3. Use gentle stick movements to continue the turn to the right.
  - If the turn is too wide, add more right stick.
  - If the turn is too tight, add less right stick.
- 4. To stop the turn, gently release the right stick and lower the throttle to maintain level flight.

Tip: Try to finish the turn at the same altitude it was started from.

For a left hand turn, follow steps above, moving the stick to the left.

