

# A7 TORNADO



## Flight Manual



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2

Table of Contents

If you have questions about operating or installing your new Megatech product, or if you are missing parts... Please Call Megatech First!

**DO NOT RETURN THIS PRODUCT TO THE STORE**

Call our Customer Service Department at:

(888) MEGA-911 or send an e-mail to:

info@megatech.com

10:00am - 5:00pm, EST Monday through Friday (except holidays)

Technical assistance is also available on-line at [www.megatech.com](http://www.megatech.com) or by e-mail to [questions@megatech.com](mailto:questions@megatech.com)

Congratulations. You have just purchased a radio controlled A7 To do that incorporates some of the most technically advanced electro available. All of this technology combines to make the A7 Tornado incredibly stable and one of the easiest in the world to fly. Even if it is your first R/C product, your flights with the A7 Tornado are virtually guaranteed. You must, however, follow the instructions..

Please read this entire flight manual carefully before you attempt to build or fly your A7 Tornado.

**DO NOT RETURN THIS PRODUCT TO THE STORE**

### TABLE OF CONTENTS

- Getting Acquainted .....
- Safety Warnings.....
- Assembly.....
- Charging the A7 Onboard Battery.....
- Pre-Flight.....
- Launching.....
- Flying School.....
- Flying Tips.....
- Limited Warranty.....

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**⚠ Important!** Before you begin, please read the warnings listed on the following page. Failure to comply with the following recommendations could lead to bodily harm or injury. The Megatech A7 Tornado is not intended for those under 12 years of age without proper adult supervision.

### Safety Warnings



Please read these before operating.



This device complies with part 15 of FCC rules.

Operation 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.

Please read before operating your A7 Tornado.

#### General

- You alone are responsible for operating your model in a safe manner. When flying, you are responsible for your own safety and the safety of others around you. Follow these basic safety guidelines at all times.
- When operating/flying always be aware of spinning impellor. Be careful not to let them come close to your person, others and/or loose clothing.
- Always fly your airplane in a wide-open area. You'll need at least two football fields worth of area that is free from obstructions such as buildings, electric power lines, trees, roads, other people or vehicles. Do not fly around people who are unaware that you are flying a model airplane, and never fly over people's heads.
- Do not fly your model if other models are being operated in the area on the same frequency.
- Do not attempt to disassemble any of the model's components or allow them to get wet. Electrical damage may occur.
- Never fly your model from roadways or after dark.
- Keep spectators behind you when flying.
- Before flying, make sure you perform a range check to be sure you can maintain control at least 25-feet from transmitter to model with the transmitter antenna extended.
- Since your model is controlled by a radio link it is very important to always keep a fresh alkaline battery in the transmitter. We recommend Megatech's Golden Power series, designed for RC products.
- Never use solvents or liquid cleaners to clean this model. Doing so may damage the unit or electronics. Only use a dry, soft cloth for cleaning.

3

Safety Warnings

4

Assembly

### Assembly

#### 1) Installing the wing

Notice that there is a left wing, and a right wing. Also take note that they angle toward the rear of the plane. Peel the protective covering of the mounting tape on both the fuselage and the underside of the wing. Fasten the wings to the fuselage by first holding the wing a 45 degree angle in relation to the fuselage and then lining up the edge of the wing with the fuselage wing-saddle. When you are satisfied that alignment is correct, press the wing down onto the fuselage's wing saddle so the tape adheres. Note; be sure the wing and wing saddle is up before pressing taped areas together. Do one side at a time.

#### 2) Preparing the transmitter

- Remove the battery compartment cover located on the back of the transmitter by sliding it down.
- Install 8 "AA" alkaline batteries making sure you pay close attention that the polarity (+ and - signs) is correct. Refer to the symbols located on the inside of the radio box to help you.
- Replace the battery cover.
- Insert and screw in the antenna in the top of the transmitter. NO NOT over tighten it!
- Turn the transmitter on by sliding the "power" switch to the right. Check to make sure that the red and green LED lights are glowing, then, switch off the transmitter to conserve battery power.



### Charging the A7's Onboard Battery

You alone are responsible for the safety of yourself and others around you and the vehicle used for charging!!

#### 1) Warnings and Precautions

- Never have the vehicle engine running. This may cause overcharging and a possible fire.

- Never leave battery unattended while charging.
- Never attempt to charge a battery that appears damaged.
- Never charge longer than 15-minutes.
- Never place a charging battery on your cars seats or console, but rather a flame resistant material such as an oven mitt.
- Always allow the battery to cool completely before recharging.
- Always place charging battery on a fire resistant material.

## 2) Charging Instructions

- Remove battery from airplane while charging.
- Plug battery into charger
- Plug charger into vehicle cigarette lighter.
- Rotate timer dial to the 10-minute mark.
- The L.E.D. should illuminate. If not check the battery and cigarette lighter connections.

After about 10-minutes or so the L.E.D. will go out indicating the battery is charged and ready to install in airplane for flight. It is normal that the battery be warm to the touch at the end of the charge cycle.



## Pre-Flight

### 1) Radio-range check

Turn on the transmitter but leave the antenna down, then switch on the model. (Note: The transmitter is always the first thing on, and the last thing off.) Have a friend hold the model, the walk about 20-feet away, and with the antenna up, make sure the plane's motor responds reliably to control.



### Important tip

Never attempt a motor-check or a radio-range check without the help of a friend or parent. Doing so alone the model could possibly get away from you and damage itself.

### 2) Motor check

While an assistant holds the model with the nose pointing away from him/her, test the following:

- Move the left-hand stick forward—the motor should run.

### 3) Rudder control check

- Move the right-hand stick to the right—the rudder should move to the right
- Move the right-stick to the left—the rudder should move to the left.

#### Important tip

Whenever you pick up the aircraft, be sure to keep your fingers away from the control sticks of the transmitter to prevent the motor from accidentally being turned on.

### Launching

- Be sure to assemble and fly you aircraft with adult supervision.
- Keep clear of the propeller blades.
- Never fly near cars, people, pets, overhead wires, bodies of water, buildings, trees, etc.
- Fly only in a large grassy open areas.
- Keep the plane within 100-feet of yourself.

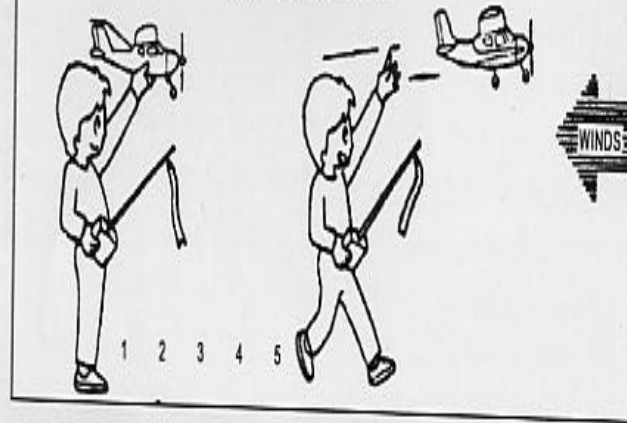
#### 1) Flight conditions

- Wind must be below 5mph.
- The wind-indicator ribbon should be at no more than a 45-degree angle.
- Humidity and temperature must be comfortable (not too hot) so that the air is fairly dense.
- Your altitude should be below 2,000-feet above sea level.

#### 2) Hand launching

- Hold the controller in your left hand, and the model in your right hand (if you're right handed).
- Turn so you're facing directly into the wind.
- Push the throttle stick forward all the way so that the motor is running at full-speed.
- Using the horizon as a zero-degree reference, gently toss the plane at a slight upward angle (15 to 20-degrees).
- Do not throw too hard or you'll stall the motor and the plane won't climb. Use about the same amount of force it takes to throw a dart at a dartboard.
- Keep the throttle on full, and the model tracking straight until you reach a safe altitude (about 40-feet).
- Use the rudder to keep the plane going straight while gaining altitude.
- DO NOT turn until you gain safe altitude. Doing so could cause a crash.

### Hand Launch Takeoff



### Flight School

#### 1) Transmitter inputs

- Left stick at middle or back: Stops the motor-model glides/descends
- Left stick forward: Motor runs at high speed-model climbs.
- Right stick to right: Model turns right.
- Right stick to left: Plane turns left.



#### 2) Controlling the plane

- To climb—Push the left-hand throttle stick forward
- To glide/descend—Release the left-hand throttle stick



### 3) Turning

- While the model is flying away from you: Pulse the right-hand stick in the direction you wish to turn. DO NOT hold the stick without pulsing it or the plane will turn too sharply and go into a spiral dive.
- Control reversal when plane is flying toward you: When the model is coming toward you, it appears to turn in the wrong direction. But, if you imagine yourself in the pilot's seat, the model is, in fact, turning correctly. Try turning your back toward the aircraft and looking over your shoulder. In the beginning, this will help keep you oriented when the model is coming toward you.

### Flying Tips

- Keep the plane flying out in front of you and don't let it pass over head if possible. This can be very disorienting.
- Learn to fly oval circuits out in front of you in both directions while maintaining altitude—the advance to figure-8s.
- If you apply full throttle too long, the model may nose up too much and stall. To overcome this, back off the throttle when the plane gets into a nose-high attitude greater than 30-degrees. Let it glide for a moment—then apply throttle again.
- If the nose goes too high and the plane stalls (stops flying and the nose drops sharply), do not hold the power on—release it immediately! If you do hold the throttle in this case, the model will accelerate downward since it is already in a nose-down attitude, and dive into the ground. However, if you release the throttle, the plane will straighten out and (assuming you have sufficient altitude) and you'll regain control.

### Megatech® Limited Warranty

Megatech® International guarantees this item to be free from defects for a period of 90 days from date of purchase. If any component of this product fails to function properly due to defects in materials or manufacturing process during this 90 day period, the manufacturer's obligations are limited and manufacturer can choose to either repair or replace the item.

This warranty is void if the product in question has been altered or repaired by anyone other than Megatech International or an authorized agent.

Under no circumstances will Megatech® International or any of its representatives be held liable for injury to persons or property damage resulting from assembly or use of the product. Megatech® is not liable if any outside radio frequencies interfere with the product's frequency causing loss of control. Megatech® International will not be held liable for any personal injury or property damage resulting from an out-of-control model caused by use or misuse of the product. Megatech® International expressly excludes any and all express warranties not specifically stated here and all implied warranties of merchantability and fitness for a particular purpose. There are no warranties which extend beyond the description of the warranties contained herein.

Contact the Megatech® International Service Department before returning any item that is defective according to the limitations listed above. Please be sure to pack the returned item(s) carefully. The customer must return product along with proof of purchase, a letter describing the problem and customer's address and telephone number. At this point in time we will repair the defective part or replace it and return it to the customer. Return shipping and handling in the 48 contiguous states is \$12.99. Shipping out of the 48 states will be quoted by location.

This warranty does not cover any damage caused by use, misuse, alteration, accident, or neglect, nor does it cover normal wear and tear of the product. Product returned to us which falls under this category will be submitted to our service department for repair. We reserve the right to charge any service and parts fees incurred when repairing the item.

### Megatech® International

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