

# tiger moth



**RTF**

**Tx-R**  
TRANSMITTER-READY

**Flyzone**<sup>™</sup>  
how high will you soar

## ASSEMBLE ONLY WITH ADULT SUPERVISION

Please read through this instruction booklet to **THOROUGHLY** familiarize yourself with the assembly of this airplane prior to assembly. Please inspect all parts carefully before starting assembly! If any parts are missing, broken or defective, or if you have any questions about the assembly or flying of this airplane, please call us at (217) 398-8970 and we'll be glad to help.

***This product is suitable only for people of 14 years and older.***

## WARRANTY

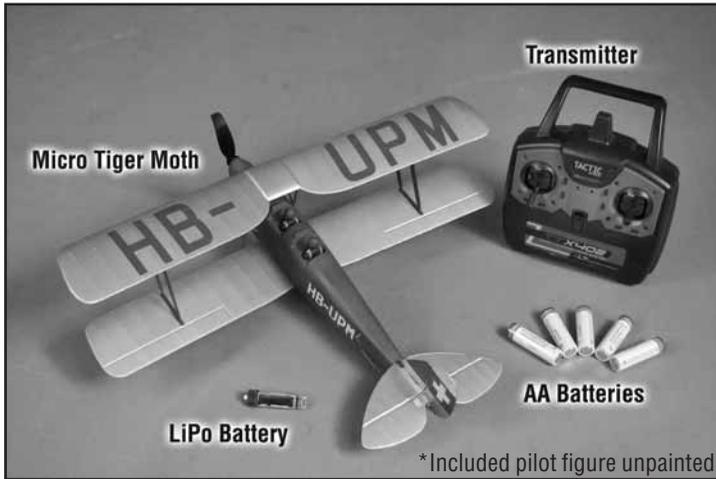
**Hobbico® Inc.** guarantees this kit to be free from defects in both material and workmanship at the date of purchase. This warranty does not cover any component parts damaged by use or modification. **In no case shall Hobbico's liability exceed the original cost of the purchased kit.** Further, Hobbico, Inc. reserves the right to change or modify this warranty without notice. In that Hobbico, Inc. has no control over the final assembly or material used for final assembly, no liability shall be assumed nor accepted for any damage resulting from the use by the user of the final user-assembled product. By the act of using the user-assembled product, the user accepts all resulting liability. **If the buyer is not prepared to accept the liability associated with the use of this product, the buyer is advised to return this kit immediately in new and unused condition to the place of purchase.** To make a warranty claim send the defective part or item to Hobby Services at the address below:

### Hobby Services

3002 N. Apollo Dr. Suite 1  
Champaign IL 61822 USA

Include a letter stating your name, return shipping address, as much contact information as possible (daytime telephone number, fax number, e-mail address), a detailed description of the problem and a photocopy of the purchase receipt. Upon receipt of the package, the problem will be evaluated as quickly as possible.

## INCLUDED ITEMS



Check the parts against those shown. If any parts are damaged or missing, please call Hobby Services at: (217) 398-8970.

**Note:** Tx-R version (FLZA2062) does not include transmitter. It does include a 1S charger.

## FCC AND ETSI

**FCC REQUIREMENT** 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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

### CE COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

**Instructions for Disposal of Waste Equipment by Private Users in the European Union:** This symbol on the product or its packaging indicates this product must not be disposed of with other household waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or location where you purchased the product.



#### Declaration of Conformity:

Product: Tactic TTX402 2.4GHz 4-Channel Tx Rx  
Item number: TACJ2402, Equipment class: 1



Tactic TTX402 transmitter and Tactic TR421 receiver: The objects of the declaration described here are in conformity with the requirements of the specifications listed below, following the provisions of the European 2006/95/EC Low Voltage Directive:

EN 60950-1:2006 Safety

The objects of the declaration described here are in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1995/5/EC:

ETSI EN 300 328 V1.7.1 Technical requirements for radio equipment  
ETSI EN 301 489-1 V1.8.1, 301 489-17 V1.3.2 General EMC requirements for radio equipment

Tactic  
c/o Hobbico, Inc.  
2904 Research Road  
Champaign, IL USA 61826

The associated regulatory agencies of the following countries recognize the noted certifications to this product as authorized for sale and use.

UK	DE	DK	BG	SE	FI	FR
EE	LV	LT	PL	CZ	SK	HU
RO	SI	AT	IT	ES	PT	IE
NL	LU	MT	CY	GR		

## PRECAUTIONS

Your Micro Tiger Moth should not be considered a toy, but rather a sophisticated, working model that functions very much like a full-size airplane. Because of its performance capabilities, the Micro Tiger Moth, if not assembled and operated correctly, could possibly cause injury to yourself or spectators and damage to property.

1. Operate the plane **according to the instructions**. **DO NOT** alter or modify the model. If you make any modifications, you void your warranty.
2. **Test** the operation of the model **before each flight** to ensure that all equipment is operating properly and that the model remains structurally sound.
3. Fly only indoors or outdoors on very calm days (with wind speeds less than 5mph) and in large open areas free of trees, people, buildings, or any other obstacles.
4. Although the Micro Tiger Moth is designed to be successfully flown by the first time pilot, you may still benefit from the assistance of an experienced pilot for your first flights. If you're not a member of an R/C club, your local hobby shop has information about clubs in your area whose membership includes experienced pilots. You can also contact the National Academy of Aeronautics (AMA) which has over 2,500 chartered clubs across the country. Instructor training programs and insured newcomer training are available through any of these clubs. Contact the AMA at the following address or toll-free phone number:

### Academy of Model Aeronautics

5151 East Memorial Drive  
Muncie, IN 47302-9252

Ph. (800) 435-9262  
Fx. (765) 741-0057

[www.modelaircraft.org](http://www.modelaircraft.org)

The R/C model hobby becomes more and more enjoyable as your experience grows. Your chances for success and graduation to higher levels are very good if you take your time and follow the flying instructions carefully and completely. We hope you enjoy flying your Micro Tiger Moth plane.

### TRANSMITTER CAUTIONS

- Do not use rechargeable (NiCd) batteries.
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc) or rechargeable (NiCd) batteries.

### BATTERY CHARGING PRECAUTIONS

1. Always remove the battery from your Micro Tiger Moth before charging.
2. Do not leave a charging battery unattended! Unplug the battery if it gets warm, even if the charge LED has not gone out.
3. Use only the charger that comes with your Micro Tiger Moth!

**WARNING:** Misuse or malfunction may overheat the battery and charger, resulting in personal injury or damage to surroundings.

### LITHIUM POLYMER BATTERY RECYCLING



**ATTENTION:** The product you have purchased is powered by a rechargeable battery. At the end of the battery's useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste system. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

**WARNING: This product contains a chemical known to the State of California to cause cancer.**

## GLOSSARY

- **Lithium Polymer (LiPo) Battery:** Rechargeable battery which is used to power the airplane. LiPo batteries are lighter and smaller than most other types of rechargeable batteries.
- **Transmitter (TX):** This is the hand-held unit that sends the signal to the control unit, or receiver (RX) in the aircraft.
- **Rudder:** The flight control on the airplane that controls turning direction. This will yaw the plane so that the nose points in toward the direction of the turn and will cause the wings to roll into the turn.
- **Elevator:** The flight control that controls pitch attitude. By adding power and pitching up, you can make the model climb or loop.
- **Servo:** The device on the model that moves the flight controls.
- **Center of Gravity (C.G.):** Point at which the aircraft must balance in order to fly properly.
- **Glide Slope:** The proper path for an airplane approaching a landing strip.

## PREPARE THE TTX402 TRANSMITTER

For more information on the Tactic Radio System included with the Micro Tiger Moth visit [www.tacticrc.com](http://www.tacticrc.com)

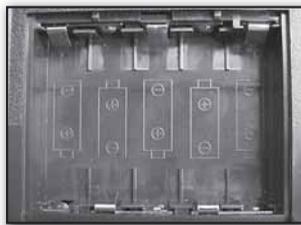


Leave the TTX402 unpowered.



Push and slide to remove the battery door.

Install (5) "AA" batteries.



## CHARGE THE 3.7V 140MAH LIPO BATTERY

*Do not use the charge feature while flying the Micro Tiger Moth!*



Leave the TTX402 unpowered.



Push and slide to open the charger cover.



Insert battery to charge. Make sure the battery plug is oriented properly before inserting.

Illuminated green light indicates charging. (It may be necessary to cycle the on/off switch to begin charging.)



## TX-R ONLY: CHARGE THE 3.7V 140MAH LIPO BATTERY

1. Install the (5) AA batteries in the included 1S charger using the diagram shown in the battery compartment.
2. Plug the 3.7V battery in to the charger as shown. The illuminated LED indicates charging.

**Warning: Do not connect the battery other than in the orientation shown!**

3. When the LED goes out, charging is complete.



## POWER THE TTX402 AND CENTER THE TRIMS



### TX-R ONLY: POWER ANYLINK OR A TACTIC 2.4GHZ TRANSMITTER

**NOTE:** Only AnyLink-compatible computer transmitters will allow the right stick to control the micro aircraft's rudder by utilizing a programming mix. Refer to your computer transmitter instruction manual to configure your transmitter or visit [Tx-Ready.com](http://Tx-Ready.com) for programming tips.

AnyLink must be in Normal Mapping (1 Beep) when Futaba®, Hitec® or Tower Hobbies transmitters are used with Tx-R aircraft. If using a Spektrum® or JR® transmitter, AnyLink must be in Alternate Mapping (2 Beeps).

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### LINKING TO MICRO TX-R AIRCRAFT

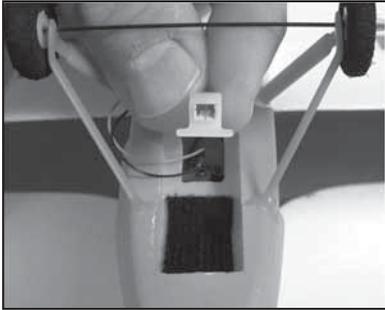
Micro Tx-R aircraft include a receiver that auto-links to a Tactic transmitter. Once the receiver is powered, it will link automatically to a present and compatible Tactic SLT 2.4GHz signal. Please follow these steps to safely link your transmitter and aircraft the first time.

1. Always power the transmitter or AnyLink first.
2. Plug in the battery to the aircraft.

**HELPFUL TIP:** Before going to fly with a group, pre-link your transmitter and receiver prior to arriving at the flying location. This must be done in an environment free of Tactic SLT 2.4GHz signals. Pre-linking ensures that familiarity is established between your transmitter and receiver. Familiarity guarantees that as long as your transmitter is powered first, your receiver will link to your transmitter regardless of the other compatible signals in the environment.

## INSTALLATION AND REMOVAL OF THE LIPO BATTERY

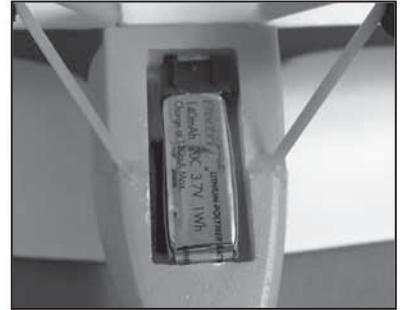
Keep hands clear of propeller during battery installation and removal.



Use two fingers to secure connector during battery installation and removal.



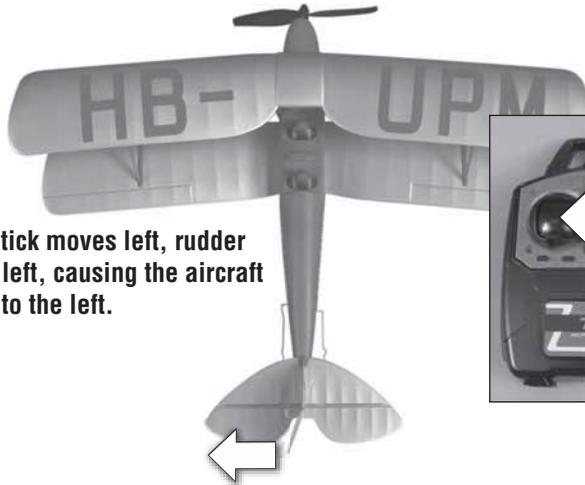
Connect the LiPo to the lead.



Press battery into place to secure.

Disconnect and remove the battery after use by holding the battery lead with two fingers and removing the battery from the lead with the other hand. **Do not yank or jerk the battery from the aircraft. This could dislodge the RX board from the Micro Tiger Moth.**

## CHECK THE CONTROL SURFACE DIRECTION



Right stick moves left, rudder moves left, causing the aircraft to turn to the left.



Right stick moves down, elevator moves up causing the aircraft's nose to pitch up, gaining altitude.

## CENTER THE CONTROL SURFACES



Before flight, center rudder control surface with rudder trim adjustment.



Before flight, center elevator control surface with elevator trim adjustment.

See bottom of page 5 for trim adjustment.

## REVERSE THE CONTROL THROWS (OPTIONAL)

Unpower the model before attempting to reverse the control throws.



### RUDDER PREFERENCE:

To move the rudder control function from the right stick to the left stick, (with the model unpowered) hold both sticks to the upper outer corners while cycling the power.



Press and hold one of the corresponding control surface trim buttons and cycle the power to reverse any control surface.

## ARM THE PROPELLER

Keep hands and onlookers clear of propeller during arming and operation.



Throttle control stick is in the low or minimum position.



Raise the throttle control stick to the maximum or high position.  
«Beep»

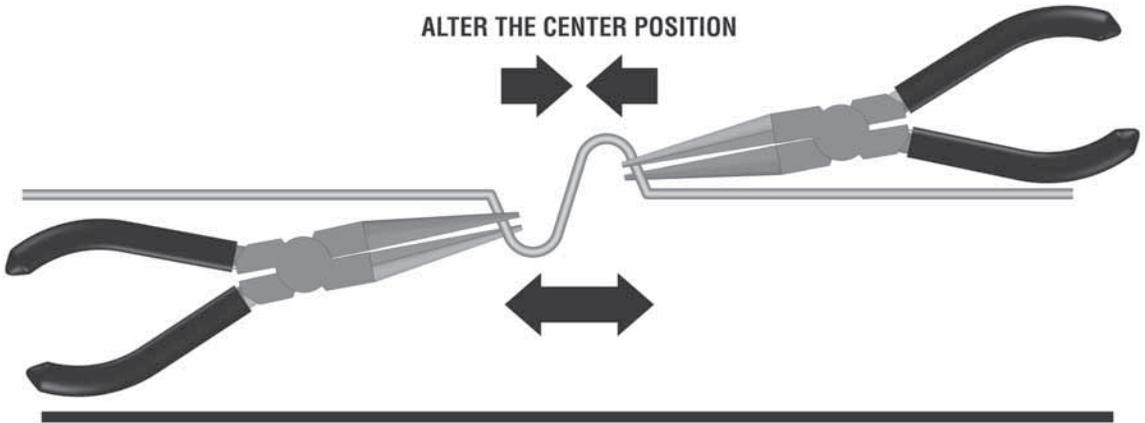


Return the throttle control stick to the minimum position. «Beep Beep»  
The motor is now armed and the propeller will operate if the throttle stick is raised.

## ADJUSTMENT OF LINKAGES: ELEVATOR AND RUDDER

To alter the center position, or increase/decrease the control throws, follow these steps. Be sure to unpower the model before attempting to mechanically adjust the linkages.

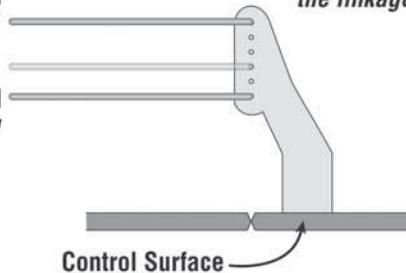
### ALTER THE CENTER POSITION



### INCREASE/DECREASE THROWS

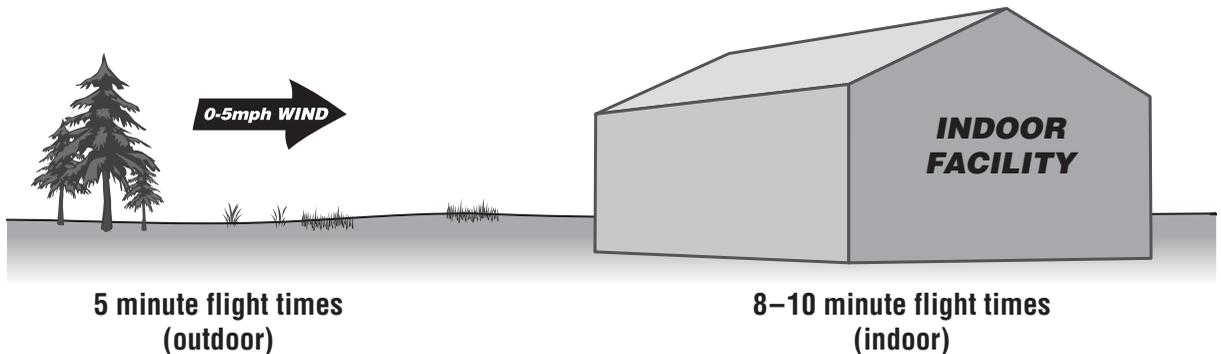
Moving the pushrod outward *decreases* the control throw

Moving the pushrod inward *increases* the control throw



*Use caution when removing and reinstalling the pushrod in the control horn to avoid accidentally disconnecting the linkage from the Rx board.*

## CHOOSE A FLYING SITE



## RANGE CHECK

With the transmitter powered and the battery plugged into the Micro Tiger Moth, walk 50' [15m] from the aircraft and check the control functions for proper and smooth operation.



50' [15m]



## FLYING THE MICRO TIGER MOTH

If anytime during operation the controls or propeller become jammed or unresponsive, lower the power to the propeller, and land. Disconnect, then reconnect the LiPo on the Micro Tiger Moth to attempt to regain control.

Take off (or hand launch) heading into the wind.

**The Micro Tiger Moth will take off with ease at just 1/2-throttle and 3/4-up elevator throw.**

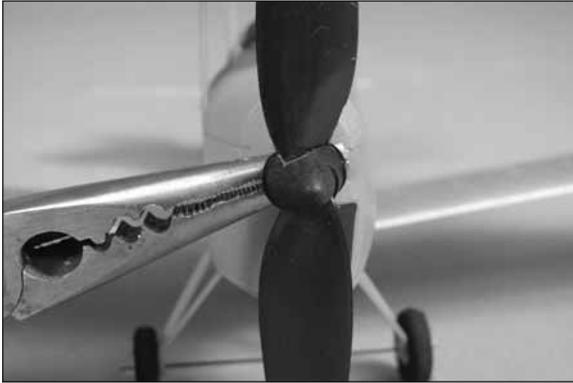
Once in the air, gain altitude to allow yourself sufficient reaction time to make a correction during flight. Once you're comfortable, adjust the rudder and elevator trims one click at a time so that the Micro Tiger Moth flies straight and level with the control sticks centered.



Concentrate on brief control stick inputs of rudder so that the Micro Tiger Moth turns without causing the aircraft to spiral. A slight amount of up elevator may be necessary to maintain altitude going into a turn and the elevator will need to be returned to neutral when coming out of a turn to avoid gaining altitude.

It's recommended that you attempt to land before the motor cuts out due to low voltage. Attempt to land into the wind by pitching the elevator up, slowing the descent and reducing the glide slope. Gradually reduce the throttle and just before touchdown apply some up elevator to land safely on the landing gear and tail skid. Unpower the model, then switch off the transmitter. Allow the motor to cool between flights.

## PROPELLER REPLACEMENT



To replace or reinstall the propeller, unpower the model, then hold the motor shaft with needle-nose pliers and push the propeller back onto the shaft. Once re-installed, add a drop of CA glue to the propeller to hold it to the shaft.

## REPAIRS

Repairs can be made to the Micro Tiger Moth by using the following items:

- Non-butane lighter fluid “Naphtha” (for parts removal and debonding)
- Thick Foam Safe CA (for parts adhesion), GPMR6072
- Foam safe CA accelerator, GPMR6035
- Two sets of needle nose pliers or hemostats, HCAR0625
- Hobby Knife (#11 blade), RMXR6900
- Clear tape
- Hinge tape, DUBQ0916

## REPLACEMENT PARTS

To order replacement parts for the Micro Tiger Moth, use the order numbers in the list below. Replacement parts are available only as listed. Replacement parts are not available from Product Support, but can be purchased from hobby shops or mail order/Internet order firms. If you need assistance locating a dealer to purchase parts from, contact:

### Product Support

Phone: 217-398-0007

Fax: 217-398-7721

E-mail: [productsupport@hobbico.com](mailto:productsupport@hobbico.com)

Stock No.	Description
FLZA6102	Motor
FLZA6340	Wing Set
FLZA6341	Fuselage
FLZA6342	Tail Set
FLZA6343	Wing Strut Set
FLZA6344	Pushrod Set
FLZA6345	Landing Gear
FLZA6346	Pilot

Stock No.	Description
FLZA6347	Control Horns
FLZA6348	Decal Set
FLZA6254	Propeller
FLZA6255	Gearbox
GPMP0760	LiPo Battery
TACJ2402	TTX402 2.4GHz Transmitter
TACL1424	TR424 Micro Rx with Servos



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