



1/18 2WD MINI MONSTER TRUCK



A Please read the instruction manual carefully before operating your car.

INSTRUCTION MANUAL

WARRANTY

Thunder Tiger Corporation guarantees this model kit to be free from defects in both material and workmanship. The total monetary value under warranty will in no case exceed the cost of the original kit purchased. This warranty does not cover any components damaged by use or modification. Part or parts missing from this kit must be reported within 60 days of purchase. No part or parts will be sent under warranty without proof of purchase. To receive part or parts under warranty, the service center must receive a proof of purchase and/or the defective part or parts. Should you find a defective or missing part, contact the authorized Thunder Tiger Service/Distributor nearest you. Under no circumstances can a dealer or distributor accept return of a kit if assembly has started.



INTRODUCTION

Thank you for purchasing the Thunder Tiger ZK-2 mini monster truck. Thunder Tiger strives to bring you the highest level of quality and service we can provide. We race and test our products around the world to bring you state-of-the-art items.

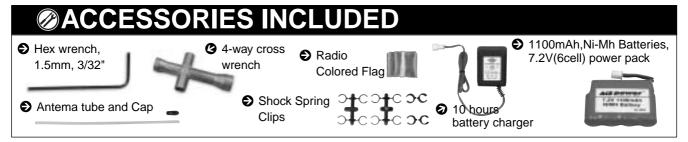
This instruction manual contains the steps you will use to prepare and use your new vehicle. Please read all instructions and familiarize yourself with the systems and controls of this product before operating. You should enjoy many hours of trouble free use from this advanced R/C product. We offer on-line help 24-7 on our www.acehobby.com or www.thundertiger.com.tw web site and our product specialists are ready to take your call if you have any technical questions. Have fun and enjoy the exciting world of R/C.

A PRECAUTION

Please read all instructions thoroughly before operation.

- 1. This product is not a toy. It is a high performance model product. It is important to familiarize yourself with the model, its manual, and its construction before assembly or operation. Children operating under the supervision of the adults is necessary.
- 2. Do not operate model products in rain, on public roads, near crowds, near airport, or near areas with restricted radio operation.
- 3. This product, its parts, and its construction tools can be possibly harmful to your health. Always exercise extreme caution when assembling and/or operating this product. Do not touch any part of model that rotates.
- 4. Check your radio frequency with the proper operating frequency of the area or country. Always check if there are any modelers operating on the same frequency as you are. Also, check your radio for proper operation before operating a mode.
- 5. Use an adequate charger for the batteries and follow the instruction correctly.
- 6. Right after use, do not touch equipment on the model because they may generate high temperatures!
- 7. Do not stall the motor. The ESC may fail if power is applied to the motor when car cannot move freely.
- 8. Improper operations may cause personal and/or property damage. Thunder Tiger and its distributor have no control over damage resulting from shipping, improper building materials, construction, or improper usage.
- 9. Thunder Tiger assumes and accepts no responsibility for personal and/or property damages resulting from the use of improper building materials, equipment and operations. By the act of assembling or operating this product, the user accepts all resulting liability. If the buyer is not prepared to accept this liability, then he/she should return this product in new, unassembled, and unused condition to the place of purchase







The Radio Control System

The Transmitter

Thunder Tiger ZK-2 mini monster truck features with an advanced PPM AM radio control system, including a micro servo, RS Receiver/Speed Control and a ACE Jaguar T2P 2-Ch AM pistol grip transmitter or T2D Dual-stick transmitter. Before operating your new radio system, please take a few minutes to familiarize yourself with the various features of the system by reading the introduction below.

1. Transmitter Antenna: Never operate the transmitter without extending this antenna or you

may create interference to other modeler.

2. Battery Level Indicator: Three LED display to indicate the battery voltage level. If the Red LED

flashes, please replace the batteries.

3. Servo Reversing Switches: To reverse the servo's rotation direction at the flip of the switch. The

reversing switches are recessed into the transmitter to prevent

accidental operation.

4. Steering Trim: Adjusts the steering in small increments or decrements to run the

model straight.

5. Throttle Trim: Adjusts the throttle in small increments or decrements to shift the

neutral position.

6a. Steering D/R (Dual Rates): Allow you to choose between two different control sensitivities.

6b. Throttle Kick-Down: Allow you to shift the physical position of the throttle stick change.

7. External Charging Jack: Recharges the transmitter battery only as using a rechargeable Nicd

or NiMh battery pack.

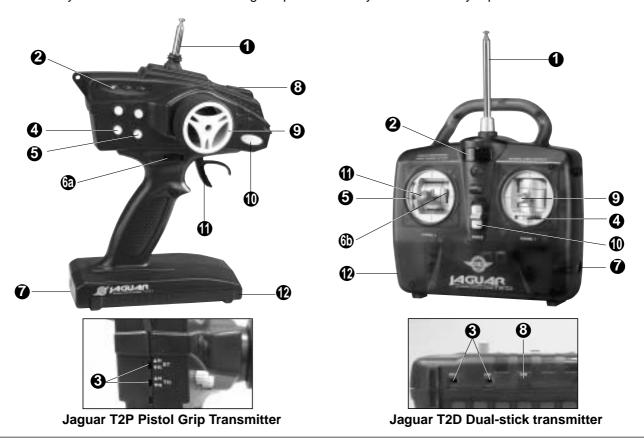
8. Crystal: To change the channel number your radio broadcasts.

9. Steering Wheel / Steering Stick: Controls the steering of the model.

10. Power Switch: Sliding to turn the transmitter on or off.

11. Throttle Trigger / Throttle Stick: Pulled or pushed to control the movement of the model.

12. Battery Cover: Sliding to open the battery cover for battery replacement/installation.





The RS Receiver/ ESC (Electric Speed Control) Module

1. Receiver & ESC: Receives the signal from the transmitter to control your vehicle and control the

power input and rotating direction of the motor.

2. Crystal: To change the channel it receives3. Power Switch: Sliding to turn the unit on or off.

4. Antenna Holder/Tube: Mounts the antenna tube as a transmitter's link.

5. Power Harness Plug: Connects the battery pack to the unit.6. Steering Servo Socket:Connects the steering servo to the unit.

7. Motor Plug: Connects the motor to the unit to get power supply.



Frequency

The RS AM Module can be used with 26, 27 or 40 MHz frequency band to operate your vehicle. Each band has 6 different channels available allowing users to change the crystals for versatile operating at the same time. When changing the crystal, just replace a set of crystal plugging on transmitter and on receiver simultaneously by pulling it out. Then push a new set of crystal into the socket carefully on the RS module and Transmitter respectively. (Caution: do not bend the two pins of the crystal or it would cause damage of your model.) The following frequency channels are available at 27MHz band.

CHANNEL	FREQUENCY BAND	FLAG COLOR	THUNDER TIGER PART NO.
• CH1	26.995 MHz	Brown Flag	AQ0311
• CH2	27.045 MHz	Red Flag	AQ0312
• CH3	27.095 MHz	Orange Flag	AQ0313
• CH4	27.145 MHz	Yellow Flag	AQ0314
● CH5	27.195 MHz	Green Flag	AQ0315
● CH6	27.255 MHz	Blue Flag	AQ0316

Each frequency is assigned a colored flag and channel number. Attach this flag to the end of your transmitter antenna so that other modelers can determine your frequency from a distance. This is very important since it is not possible for more than one model to operate on the same frequency at the same time.



OPERATION



PREPARING THE RADIO







- a. Install the antenna into transmitter
- b. Check the frequency printed on the transmitter crystal.
- c. Check the frequency printed on the RS ESC/Receiver module and crystal. Make sure it matches with the transmitter crystal. Make sure no one will operate on the same frequency when you are. When there is a radio glitch, it will most likely be caused by improper crystal, damaged crystal, or people operating on the same frequency.



BATTERY INSTALLATION







- a. Install 8 AA size alkaline batteries into the transmitter.(Make sure the correct polarity order)
- b. Install supplied power pack into the batter holder. And then secure the battery holder under the battery cover plate and RS ESC/Receiver module by using a small "R" clip.
- c. Connect the plug harness of the battery with the RS ESC/Receiver module.



RADIO OPERATION







- a When turning radio on, first turn on the transmitter.
- b. Then, turn on the receiver. When turning off, first turn the receiver off, then the transmitter off. It's an important hint to prevent unexpected damages.
- c. To reverse the functions of servos, use the small, white servo reverse switches located on side of the pistol transmitter. To trim the servos on the pistol transmitter, use the trim switches on side of the steering wheel (the ST. trims steering, and the TH trims throttle/brake). On a stick transmitter, the trim levers are located accordingly around the sticks.

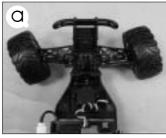
Frequency interference

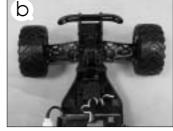
Never operate the transmitter without checking your radio frequency, or you may create interference to other modeler.

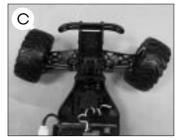




STEERING OPEATION













- a. Check the radio steering functions. With the radio transmitter and receiver on, turn the steering wheel/ stick to the left. The front tires/wheels should turn left accordingly. If not, flip the steering servo reverse switch.
- b. Return the steering wheel/ stick to neutral. The front tires / wheels should point straight forward. If not, use the steering trim knob to correct it.
- c. Turn the steering wheel/ stick to the right. The front tires/wheels should turn right accordingly.

Running with A.T.L function (Comes with ACE R/C T2P Pistol Grip Transmitter only)

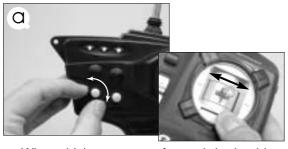
RS module features Anti-Throttle-Lock (A-T-L) function which has been designed to prevent incorrect operation of turning on the transmitter. The function will work in the conditions below,

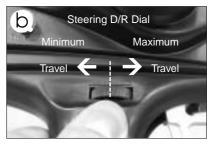
• When turning on your vehicle, leave the trigger in the natural position. If you pull the trigger before switching on, the transmitter will start beeping and disconnecting the signal transmission for safety.

If the A.T.L function works; turn off the vehicle first and follow the guide to turn on the radio again!(Radio first, vehicle second!!!)



STEERING ADJUSTMENT





- a. When driving your car forward, it should move in a straight line. If not, turning the steering trim knob clockwise or counter-clockwise until you get the neutral steering. Then the car will track in a straight line without turning the steering wheel. On a stick transmitter, the steering trim is under the steering stick.
- b. Steering D/R (comes with ACE R/C T2P pistol grip transmitter only) allows you change the steering sensitivities while running. By turning the dual rate dial as shown to correct over-steering and under-steering problems.





BATTERY CHARGING







- a. Make sure that the battery pack is completely discharged prior to charging.
 Discharging the battery pack by running the electric motor until it slows down or using a discharger(Not included).
- b. For best results, let the battery pack cool before charging. Heat may prevent the battery pack from charging to full capacity and also decreases the performance of the battery.
- c. Once the battery is ready to be charged, first plug the AC quick charger into the outlet of AC power source, and then connect the battery input/output harness to the charger.
- d. Continue to monitor the battery as it is being charged. As soon as the battery is fully charged, disconnect the battery. from the charger plug(Over-charging or charging incorrectly using inadequate chargers may cause the battery pack to become dangerously hot.)



RIDE HEIGHT (or DROOP) ADJUSTMENT



Ride height (or Droop) is the distance from the ground to the bottom of the chassis. By removing or installing the pre-load spring clips, the distance can be decreased or increased to adapt to the different terrains. Basically, a rough surface will need a higher ride height.

MAINTENANCE AFTER RUNING

- a. Always turn off the radio system and unplug the battery pack when not using the truck.
- b. Remove the sand, dirt, and any other elements completely from the truck before you store it.
- c. Never use chemicals or any solvents to clean the chassis as it may cause damage to the electronics components and plastic parts as well. Use compressed air, soft paintbrush, or toothbrush to clean dust and dirt.

HOP-UPS

Thunder Tiger is pleased to inform our customers that you don't need to wait for long-term developed optional parts anymore. Thunder Tiger also offers you the chance to turn your truck in "Factory" version! Thunder Tiger offers a series of optional parts for your appreciative choosing. It's much more durable, faithful and perfect fitting than any other aftermarket hop-up parts made for your mighty truck. Please contact your hobby shop for more exciting product information from Thunder Tiger.

- * Aluminum. Oil-Filled Shock Absorbers
- * Competition High Power Motor
- * Competition Mini ESC and Receiver
- * High Torque Micro Servo







Specifications:

Width: 190mm Height: 110mm Wheelbase: 258mm

Weight: 1415g, Ready-To-Run
Toe-in: Fully adjustable
Camber: Fully adjustable

Rear Anti-Dive: 2 degree Drive Train/ Pulley Ratio: 2.20:1 Standard Gear Ratio*22T Pinion/ 85T Spur*3.86:1

Final Drive Ratio: 8.49:1

Features:

- 100%assembled
- 2-channel radio installed
- Metal bushings
- High grip tires
- Dual belt, 4WD drive train
- Protective front foam bumper
- Standard 540 high power motor included
- Super low CG, Center of Gravity design
- Strong, fiberglass reinforced composite parts
 New " Veloci-R" micro electric speed control installed
- Fully adjustable suspension system with pivot-ball knuckles
- Oil-filled shocks with color coated springs
- Ball differential with steel out-drives and dog bones
- Stick or saddle battery packs compatible
- New 190mm pre-painted bodies with decals
- Full array of options available



