

# dynamite®

## Li-Po Tazer 10T



### Instruction Manual

Thank you for choosing the Dynamite® brand. We know that you, the customer, are the reason that we are in business. Your satisfaction is our number one priority. With this in mind, we have produced Dynamite Tazer™ to be of the highest quality, performance and reliability, and at a “value-packed” price. We hope it provides you with hours of enjoyment in your next RC project.

### Features

- Li-Po compatible circuitry protects batteries from damage due to over-discharge
- Pre-wired with Tamiya battery plug, bullet-style motor connectors, and universal receiver plug that fits JR®, Futaba and Hitec radios.
- Designed to operate with stock motors (10 turns or higher).
- Push-button programming makes setup a breeze.

### Specifications

Operation .....	Proportional forward, proportional reverse with braking delay
Input Voltage.....	4-cell (4.8 volts) to 7-cell (8.4 volts) DC Ni-MH 2S (7.4 volts) Li-Po
Peak Current .....	1000 amperes
Continuous Current.....	250 amperes
Full-On Resistance.....	0.0014 ohms
Frequency .....	2kHz
BEC output.....	5V DC, 1 amp max.
Overload Protection.....	Thermal
Dimensions.....	1.25 in x 1.02 in x .888 in (38.6mm x 26.2mm x 22.5mm)
Weight.....	1.2 oz (34 g)

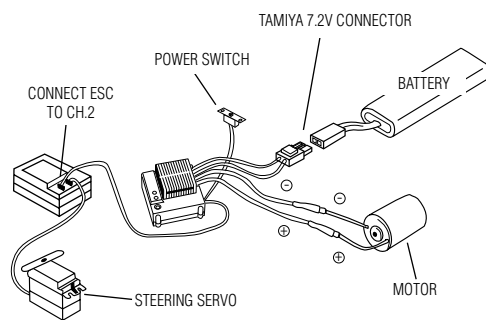
### Mounting the Speed Control

Mount the Li-Po Tazer 10T ESC in the location specified by your vehicle's instruction manual. Use the double-sided foam tape (included) to secure the speed control in position.

**NOTE:** Be sure all wiring connections can be reached prior to mounting.

Use double-sided foam tape to secure the side of the switch to a convenient location on the chassis or shock tower.

### Wiring Diagram



### Wiring the Receiver

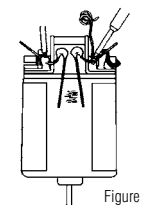
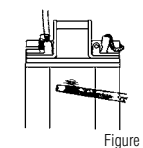
**NOTE:** The Li-Po Tazer 10T uses the motor battery to supply power to the receiver through the servo wires. There is no need for a separate receiver battery.

- See your radio's instruction manual for proper connection. Typically, channel 2 is used to control the throttle.
- There are 3 wires involved in the universal receiver connector. It is directly compatible with JR®, Hitec, Airtronics Z, new KO PROPO and Futaba systems.
- Older Airtronics or KO PROPO radio systems must use a modified wiring order.
- The positive (red) and negative (brown) wires must be reversed to operate with these radio systems. To remove the wires from the plug, use a small jewelers screwdriver to pry up the plastic tab associated with each wire. Gently slide the brown wire out of the plug. Repeat on the red wire and replace in the opposite positions.
- Install the plug referencing the wire colors on the steering servo for proper polarity.

### Motor Capacitors

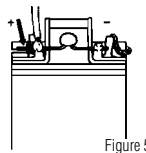
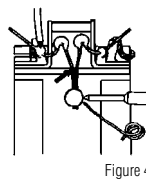
If the motor you are using (10 turns or more) does not have 3 capacitors already attached, you must install them. The monolithic capacitors help prevent motor noise which lessens radio glitches. Some motors have internal capacitors that are not visible without removing the endbell. Check the motor's instructions to confirm if capacitors are present in your motor. If your motor does not have capacitors, they can be purchased at your local hobby shop. Follow the directions below for proper connection.

1. Using a small file, scuff up an area on the motor can between the positive and negative tabs (see figure 2).
2. Take one of the capacitors and solder one wire to the positive motor tab with the other wire positioned over the scuffed area on the motor housing (see figure 3).
3. Use another capacitor and solder one wire to the negative motor tab with the other wire positioned over the scuffed area as well.
4. Solder both wires to the motor housing (see figure 4). A high wattage soldering iron may be necessary.



5. Solder the third capacitor from the positive to the negative motor tabs (see figure 5).
6. Use side cuts to remove excess capacitor wires.

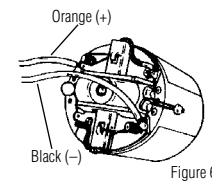
Some forward-only ESCs require a Shottky diode attached to the motor for noise suppression. Be certain there IS NOT a diode attached to the motor when using the Li-Po Tazer 10T or any other reversing electronic speed control.



### Connecting the Motor Wires

If your motor has pre-attached male bullet connectors, press the orange motor wire into the plug that is wired to the positive motor terminal. The black wire is connected in the same manner to the negative motor tab (see figure 6).

If your motor does not have male bullet connectors, you may purchase them from your local hobby shop. (“Motor Connector Wire DLR1055”).



**Caution:** To detour glitches caused by RF (radio frequency) noise, route all wires and the receiver antenna away from motor leads. Secure with tie wraps (not included).

### Connecting the Battery

The Li-Po Tazer 10T comes pre-wired with a Tamiya-style connector, compatible with most battery packs. The Li-Po Tazer 10T is compatible with battery packs from 4-cell (4.8-volt) to 7-cell (8.4-volt) sub-C size battery packs and 2S (7.4-volt) Li-Po packs as well.

1. Be sure the on/off switch is in the “off” position.
2. Connect a fully charged battery pack to the speed control's battery connector.

## Adjusting the Transmitter

**NOTE:** Refer to the radio instructions for specific information on transmitter setup.

1. Set the “throttle reversing” switch to the NORMAL position. (This may need to be reversed on some brands of radios.)
2. Set the “throttle trim” to the CENTER position.
3. Set the “throttle exponential” to MINIMUM or ZERO.
4. Set the “ATV” to 100%.
5. If your transmitter has an adjustable trigger (or stick) position, move it to the 70/30 position.

## Speed Control Programming

**NOTE:** While in the programming mode, no power is applied to the motor.

1. Turn on the transmitter's power switch. (Be sure the transmitter batteries are fully charged).
2. Turn the ESC switch on.
3. Press and release the setup button. The red and green LEDs will light.
4. Move the throttle to the full throttle position and press the programming button. The green LED will remain lit and the red LED will go out. (If the ESC does not sense throttle movement in 3 seconds by the transmitter, it will exit the programming mode and you will have to begin again.)
5. Now move the throttle to full reverse and press the programming button. The red LED will glow and the green LED will go out.
6. Return the throttle stick to neutral and press the programming button. The green LED will glow and the red LED will go out, indicating programming is complete.

During normal operation, the green LED indicates neutral and the red LED indicates full forward and full reverse.

## Selecting Battery Type

When the ESC is powered up the color of the flashing LED determines which battery mode the ESC is currently programmed to.

The modes are as follows:

Flashing red LED - Li-Po mode (cut off at 6.0V.)

Flashing green LED - Ni-MH mode (cut off at 4.0V.)

In order to change the battery type, press and hold the setup key while powering up the ESC.

## Troubleshooting Guide

Symptom	Solution
Steering servo operates but the motor does not run	Programming is not complete. Re-program the ESC by following the programming instructions. Speed control connected to receiver incorrectly. Refer to manufacturer's instructions. Motor defective. Test motor independently, repair or replace as needed. Low batteries. Charge as needed. Overload Protection enabled. Check motor and connections.
Steering and motor do not function	Receiver wired incorrectly. Check polarity and orientation of control plugs. Radio inoperational. See radio instruction manual. Batteries discharged. Recharge or replace.
Full speed not attainable	Battery has reached the programmed voltage cutoff. Transmitter adjusted improperly. See radio instructions for proper adjustment. ESC programmed incorrectly. Reprogram.
Motor slows but will not stop	Throttle trim may be set improperly. See radio instruction manual. ESC program does not match transmitter. Re-program ESC.
Reduced radio range / Interference	Motor capacitors broken/missing. Repair or replace. Motor noise. Move receiver further away from ESC, motor and wiring. Transmitter batteries low. Replace batteries. Interference transmitted on or near radio frequency. Relocate or change radio channels (see manufacturer's instructions).

## Warranty Period

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warrants that the Products purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase by the Purchaser.

## Limited Warranty

(a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims. Further, Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

(c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any goods by Purchaser must be approved in writing by Horizon before shipment.

## Damage Limits

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability.

If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

Law: These Terms are governed by Illinois law (without regard to conflict of law principals).

## Safety Precautions

This is a sophisticated hobby Product and not a toy. 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. The Product 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 injury.

## Questions, Assistance, and Repairs

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please direct your email to [productsupport@horizonhobby.com](mailto:productsupport@horizonhobby.com), or call 877.504.0233 toll free to speak to a service technician.

## Inspection or Repairs

If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. A Service Repair Request is available at [www.horizonhobby.com](http://www.horizonhobby.com) on the "Support" tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

## Warranty Inspection and Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon Hobby.

## Non-Warranty Repairs

Should your repair not be covered by warranty the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair estimates will be billed a minimum of 1/2 hour of labor. In addition you will be billed for return freight. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. Please note: non-warranty repair is only available on electronics and model engines.

## United States:

Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Service Center  
4105 Fieldstone Road  
Champaign, Illinois 61822  
USA

All other Products requiring warranty inspection or repair should be shipped to the following address:

Horizon Product Support  
4105 Fieldstone Road  
Champaign, Illinois 61822  
USA

Please call 877-504-0233 or e-mail us at [productsupport@horizonhobby.com](mailto:productsupport@horizonhobby.com) with any questions or concerns regarding this product or warranty.

## United Kingdom:

Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Hobby UK  
Units 1-4 Ployters Rd  
Staple Tye  
Harlow, Essex  
CM18 7NS  
United Kingdom

Please call +44 (0) 1279 641 097 or e-mail us at [sales@horizonhobby.co.uk](mailto:sales@horizonhobby.co.uk) with any questions or concerns regarding this product or warranty.

## Germany:

Electronics and engines requiring inspection or repair should be shipped to the following address:

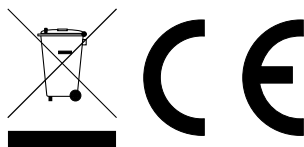
Horizon Technischer Service  
Hamburger Strasse 10  
25335 Elmshorn  
Germany

Please call +49 4121 46199 66 or e-mail us at [service@horizonhobby.de](mailto:service@horizonhobby.de) with any questions or concerns regarding this product or warranty.

**CE Compliance Information for the  
European Union**

**Instructions for Disposal of WEEE by Users in the European Union**

This product must not be disposed of with other 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 where you purchased the product.



**Declaration of Conformity**

(in accordance with ISO/IEC 17050-1)

No. HH2009081005

Product(s): DYN Li-Po 10T Tazer ESC

Item Number(s): DYN4928

Equipment class: 1

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European EMC Directive 2004/108/EC:

- EN55022 Radio disturbance characteristics
- EN55024 Immunity characteristics
- EN 61000-4-2 Electrostatic discharge immunity test

Signed for and on behalf of:

Horizon Hobby, Inc.  
Champaign, IL USA  
Aug 10, 2009

Steven A. Hall

Vice President  
International Operations and Risk Management  
Horizon Hobby, Inc.

**Setup Notes**

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