

49/20

# MUSTANG



**OWNER'S MANUAL** 

# INTRODUCTION

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Officially licensed from Ford Motor Company, a global automotive industy leader, Traxxas' new Ford Mustang Drift Car puts you behind the wheel of this legendary performance vehicle. The XL-5 ESC and Titan Drift horsepower stays true to the Mustang's performance heritage, cranking out tire-shredding torque for instant acceleration and power slides. The Ford Mustang Drift Car is an impressive street machine with rear wheel drive and oil-filled Ultra Shocks, fully assembled and Ready-To-Race®. Built to be driven, this Ford Mustang Drift Car rests on the Traxxas 4-Tec™ drift chassis.

This manual contains the instructions you will need to operate, and maintain your model so that you can enjoy it for years to come. We want you to feel confident that you own one of the best-performing models in the market and that it is backed by a team of professionals who aim to provide the highest level of factory support possible. Traxxas models are about experiencing total performance and satisfaction, not just with your model, but also with the company that stands behind it.

We know you're excited about getting your new model on the road, but it's very important that you take some time to read through the Owner's Manual. This manual contains all the necessary set-up and operating procedures that allow you to unlock the performance and potential that Traxxas engineers designed into your model. Even if you are an experienced R/C enthusiast, it's important to read and follow the procedures in this manual.

Thank you again for going with Traxxas. We work hard every day to assure you the highest level of customer satisfaction possible. We truly want you to enjoy your new model!

# **Traxxas Support**

Traxxas support is with you every step of the way. Refer to the next page to find out how to contact us and what your support options are.



# **Ouick Start**

This manual is designed with a Quick
Start path that outlines the necessary
procedures to get your model up
and running in the shortest time possible. If you are an
experienced R/C enthusiast, you will find it helpful and fast.
Be sure and read through the rest of the manual to learn
about important safety, maintenance, and adjustment

# REGISTERING YOUR MODEL

procedures. Turn to page 9 to begin.

In order to serve you better as our customer, please register your product within 10 days of your purchase online at Traxxas.com/register.

Traxxas.com/register

#### FCC Compliance

This device contains a module that complies with the limits for a Class B digital device as described in part 15 of the FCC rules. Operation is 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.

The limits for a Class B digital device are designed to provide reasonable protection against harmful interference in residential settings. This product generates, uses and can radiate radio frequency energy, and, if not operated in accordance with the instructions, may cause harmful interference to radio communications. The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Canada, Industry Canada (IC)

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210. This device complies with Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: This device may not cause interference, and This device must accept any interference, including interference that may cause undesired operation of the device.

# Radio Frequency (RF) Exposure Statement

This equipment complies with radio frequency exposure limits set forth by FCC and Industry Canada for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body or bystanders and must not be co-located or operating in conjunction with any other antenna or transmitter.

Operation Frequency: 2414~2453 MHz

Maximum Radio Frequency Power: Maximum Peak Power 9.7 dBm

# BEFORE YOU PROCEED

Carefully read and follow all instructions in this and any accompanying materials to prevent serious damage to your model. Failure to follow these instructions will be considered abuse and/or neglect.

Before running your model, look over this entire manual and examine the model carefully. If for some reason you decide it is not what you wanted, then do not continue any further. Your hobby dealer absolutely cannot accept a model for return or exchange after it has been run.

# WARNINGS, HELPFUL HINTS, & CROSS-REFERENCES

Throughout this manual, you'll notice warnings and helpful hints identified by the icons below. Be sure to read them!



An important warning about personal safety or avoiding damage to your model and related components.



Special advice from Traxxas to make things easier and more fun.



Refers you to a page with a related topic.

# SUPPORT

If you have any questions about your model or its operation, call the Traxxas Technical Support Line toll-free at: 1-888-TRAXXAS (1-888-872-9927)\*

Technical support is available 7 days a week from 8:30am to 9:00pm central time. Technical assistance is also available at Traxxas.com. You may also e-mail customer support with your question at support@Traxxas.com. Join thousands of registered members in our online community at Traxxas.com.

Traxxas offers a full-service, on-site repair facility to handle any of your Traxxas service needs. Maintenance and replacement parts may be purchased directly from Traxxas by phone or online at Traxxas.com. You can save time, along with shipping and handling costs, by purchasing replacement parts from your local dealer.

Do not hesitate to contact us with any of your product support needs. We want you to be thoroughly satisfied with your new model!

Traxxas 6250 Traxxas Way McKinney, Texas 75070 Phone: 972-549-3000 Toll-free 1-888-TRAXXAS

Internet Traxxas.com E-mail: support@Traxxas.com

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# SAFETY PRECAUTIONS



All instructions and precautions outlined in this manual should be strictly followed to ensure safe operation of your model.



This model is not intended for use by children under 14 years of age without the supervision of a responsible and knowledgeable adult.



No previous experience with radio controlled models is required.
Models require a minimum of setup, maintenance, or support equipment.

All of us at Traxxas want you to safely enjoy your new model. Operate your model sensibly and with care, and it will be exciting, safe, and fun for you and those around you. Failure to operate your model in a safe and responsible manner may result in property damage and serious injury. The precautions and instructions provided or available for this product(s) should be strictly followed to help ensure safe operation. You alone must see that the instructions are followed and the precautions are adhered to.

# **Important Points to Remember**

- Your model is not intended for use on public roads or congested areas where its operation can conflict with or disrupt pedestrian or vehicular traffic.
- Never, under any circumstances, operate the model in crowds of people. Your model is very fast and could cause injury if allowed to collide with anyone.
- Because your model is controlled by radio, it is subject to radio interference from many sources that are beyond your control. Since radio interference can cause momentary losses of radio control, always allow a safety margin in all directions around the model in order to prevent collisions.
- The motor, battery, and speed control can become hot during use. Be careful to avoid getting burned.
- Don't operate your model at night, or anytime your line of sight to the model may be obstructed or impaired in any way.

# **Speed Control**

Your model's electronic speed control (ESC) is an extremely powerful electronic device capable of delivering high current. Please closely follow these precautions to prevent damage to the speed control or other components.

- Disconnect the Battery: Always disconnect the battery or batteries from the speed control when not in use.
- Insulate the Wires: Always insulate exposed wiring with heat shrink tubing to prevent short circuits.

- Transmitter on First: Switch on your transmitter first before switching on the speed control to prevent runaways and erratic performance.
- Don't Get Burned: The ESC and motor can become extremely hot during use, so be careful not to touch them until they cool. Supply adequate airflow for cooling.
- Use the Factory-Installed Connectors: Do not change the battery and motor connectors. Improper wiring can cause fire or damage to the ESC.
   Please note that modified speed controls can be subject to a rewiring fee when returned for service.
- No Reverse Voltage: The ESC is not protected against reverse polarity voltage.
- No Schottky Diodes: External Schottky diodes are not compatible with reversing speed controls. Using a Schottky diode with your Traxxas speed control will damage the ESC and void the 30-day warranty.
- Always adhere to the minimum and maximum limitations of the speed control as stated in the specifications table in the Owner's Manual. If your ESC operates on two batteries, do not mix battery types and capacities. Use the same voltage and capacity for both batteries. Using mismatched battery packs could damage the batteries and electronic speed control.

# Recycling Traxxas iD® NiMH Batteries

Traxxas strongly encourages you to recycle iD® NiMH batteries when they reach the end of their useful life. Do not throw batteries in the trash. All Traxxas iD® NiMH battery packs display the RBRC (Rechargeable Battery Recycling Corporation) icon, indicating they are recyclable. To find a recycling center near you, ask your local hobby dealer or visit www.call2recycle.org.

# **WARNING! CAUTION! DANGER!**

FIRE HAZARD! Your model is able to use LiPo batteries. LiPo batteries have a minimum safe discharge voltage threshold that should not be exceeded. The electronic speed control is equipped with built-in Low-Voltage Detection that alerts the driver when LiPo batteries have reached their minimum voltage (discharge) threshold. It is the driver's responsibility to stop immediately to prevent the battery pack from being discharged below its safe minimum threshold.

- Low-Voltage Detection is just one part of a comprehensive plan for safe LiPo battery use. It is critical to follow all instructions for safe and proper charging, use, and storage of LiPo batteries. Make sure you understand how to use your LiPo batteries. If you have questions about LiPo battery usage, please consult with your local hobby dealer or contact the battery manufacturer. As a reminder, all batteries should be recycled at the end of their useful life.
- ONLY use a Traxxas iD charger to charge Traxxas iD batteries.
   ONLY use a Lithium Polymer (LiPo) balance charger with a
   balance adapter port to charge LiPo batteries. Never use NiMH or
   NiCad-type chargers or charge modes to charge LiPo batteries.
   DO NOT charge LiPo batteries with a NiMH-only charger. The use
   of a NiMH or NiCad charger or charge mode will damage LiPo
   batteries and may cause fire, personal injury, and/or property
   damage.
- NEVER charge LiPo battery packs in series or parallel. Charging packs in series or parallel may result in improper charger cell recognition and an improper charging rate that may lead to overcharging, cell imbalance, cell damage, and fire.
- ALWAYS inspect your LiPo batteries carefully before charging.
  Look for any loose leads or connectors, damaged wire insulation,
  damaged cell packaging, impact damage, fluid leaks, swelling
  (a sign of internal damage), cell deformity, missing labels, or
  any other damage or irregularity. If any of these conditions are
  observed, do not charge or use the battery pack. Follow the
  disposal instructions included with your battery to properly and
  safely dispose of the battery.
- DO NOT store or charge LiPo batteries with or around other batteries or battery packs of any type, including other LiPos.

- Store and transport your battery pack(s) in a cool dry place. DO NOT store in direct sunlight. DO NOT allow the storage temperature to exceed 140°F or 60°C, such as in the trunk of a car, or the cells may be damaged and create a fire risk.
- DO NOT disassemble LiPo batteries or cells.
- DO NOT attempt to build your own LiPo battery pack from loose cells.

# Charging and handling precautions for all battery types

- BEFORE you charge, ALWAYS confirm that the charger settings exactly match the type (chemistry), specification, and configuration of the battery to be charged. DO NOT exceed the maximum manufacturer recommended charge rate.
- DO NOT attempt to charge batteries that have an internal charge circuit or a protection circuit, batteries that have been altered from original manufacturer configuration, or batteries that have missing or unreadable labels, preventing you from properly identifying the battery type and specifications.
- ALWAYS use a Traxxas iD charger to charge Traxxas iD batteries.
- DO NOT let any exposed battery contacts or wires touch each other. This will cause the battery to short circuit and create the risk of fire.
- While charging or discharging, place the battery (all types of batteries) in a fire retardant/fire proof container and on a nonflammable surface such as concrete.
- DO NOT charge batteries inside of an automobile. DO NOT charge batteries while driving in an automobile.
- NEVER charge batteries on wood, cloth, carpet, or on any other flammable material.
- ALWAYS charge batteries in a well-ventilated area.
- REMOVE flammable items and combustible materials from the charging area.
- DO NOT leave the charger and battery unattended while charging, discharging, or anytime the charger is ON with a battery connected. If there are any signs of a malfunction or in the event of an emergency, unplug the charger from the power source and disconnect the battery from the charger.

#### SAFETY PRECAUTIONS

# (continued from previous page)

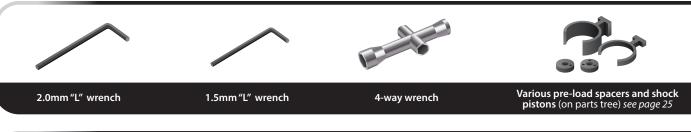
- DO NOT operate the charger in a cluttered space, or place objects on top of the charger or battery.
- If any battery or battery cell is damaged in any way, DO NOT charge, discharge, or use the battery.
- Keep a Class D fire extinguisher nearby in case of fire.
- DO NOT disassemble, crush, short circuit, or expose the batteries to flame or other source of ignition. Toxic materials could be released. If eye or skin contact occurs, flush with water.
- If a battery gets hot to the touch during the charging process (temperature greater than 110°F / 43°C), immediately disconnect the battery from the charger and discontinue charging.
- Allow the battery pack to cool off between runs (before charging).
- ALWAYS unplug the charger and disconnect the battery when not in use.

- ALWAYS unplug the battery from the electronic speed control when the model is not in use and when it is being stored or transported.
- DO NOT disassemble the charger.
- REMOVE the battery from your model or device before charging.
- DO NOT expose the charger to water or moisture.
- ALWAYS store battery packs safely out of the reach of children or pets. Children should always have adult supervision when charging and handling batteries.
- Nickel-Metal Hydride (NiMH) batteries must be recycled or disposed of properly.
- Always proceed with caution and use good common sense at all times.

# TOOLS, SUPPLIES, AND REQUIRED EQUIPMENT

Your model comes with a set of specialty metric tools. You'll need to purchase other items, available from your hobby dealer, to operate and maintain your model.

# SUPPLIED TOOLS AND EQUIPMENT





# REQUIRED EQUIPMENT





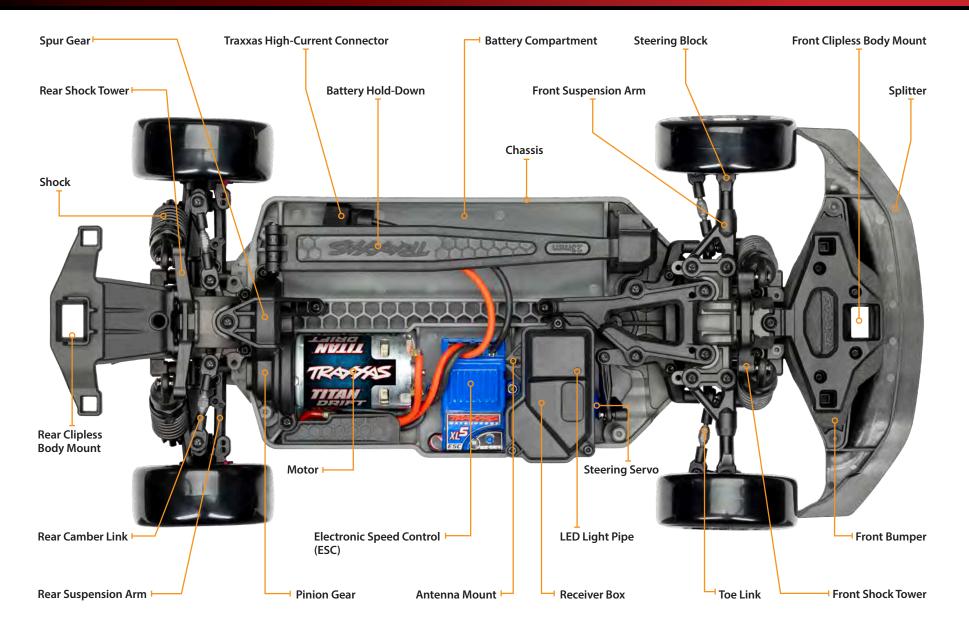
For more information on batteries, see *Use the Right Batteries* on page 13.



Recommended Equipment
These items are not required
for the operation of your
model, but are a good idea to
include in any R/C toolbox:

- Safety glasses
- Traxxas Ultra Premium Tire Glue, part #6468 (CA glue)
- Hobby knife, part #3437
- Side cutters and/or needle nose pliers

# MODEL OVERVIEW



# QUICK START: GETTING UP TO SPEED

The following guide is an overview of the procedures for getti corners of Quick Start pages.	ng your model running. Look for the Quick Start logo on the bottom
1. Read the safety precautions on pages 4-6	7. Check servo operation • See page 16
For your own safety, understand where carelessness and misuse could lead to personal injury.	Make sure the steering servo is working correctly.
2. Charge the battery pack • See page 13	8. Range test the radio system • See page 16
Your model requires a battery pack and a compatible battery charger (not included). Never use a NiMH or NiCad charger to charge LiPo batteries.	Follow this procedure to make sure your radio system works properly at a distance and that there is no interference from outside sources.
3. Install batteries in the transmitter • See page 13	9. Detail your model • See page 10
The transmitter requires 4 AA alkaline batteries (sold separately).	Install wings (if necessary) and apply other decals if desired.
4. Install battery pack in the model • See page 14	☐ 10. Drive your model • See page 21
Your model requires a fully charged battery pack (not included).	Driving tips and adjustments for your model.
5. Install the antenna • See page 14	11. Maintaining your model • See page 30
The receiver antenna and antenna tube must be properly installed before operating your model.	Follow these critical steps to maintain the performance of your model and keep it in excellent running condition.
☐ 6. Turn on the radio system • See page 15	
Make a habit of turning the transmitter on first and off last.	



The Quick Start Guide is not intended to replace the full operating instructions available in this manual. Please read this entire manual for complete instructions on the proper use and maintenance of your model.

Look for the Quick Start logo at the bottom of Quick Start pages.



# TRAXXAS TQ: 2.4GHz RADIO SYSTEM



# **Applying the Decals**

The main decals for your model have been applied at the factory. Additional decals have been printed on selfadhesive clear mylar and are die-cut for easy removal. Use a hobby knife to lift the corner of a decal and lift it from the backing.



To apply the decals, place one end down, hold the other end up, and gradually smooth the decal down with your finger as you go. This will prevent air bubbles. Placing both ends of the decal down and then trying to smooth it out will result in air pockets. Look at the photos on the box for typical decal placement.





# INTRODUCTION

Your model includes the latest Traxxas TQi 2.4GHz transmitter with Traxxas Link™ Model Memory. The transmitter's easy-to-use design provides instant driving fun for new R/C enthusiasts, and also offers a full complement of pro-level tuning features for advanced users – or anyone interested in experimenting with the performance of their model. The steering and throttle channels feature adjustable Exponential, End Points, and Sub-Trims. Steering and braking Dual-Rate are also available. Many of the next-level features are controlled by the Multi-Function knob, which can be programmed to control a variety of functions. The detailed instructions (page 31) and Menu Tree (page 34) included in this manual will help you understand and operate the advanced functions of the new TQi radio system. For additional information and how-to videos, visit Traxxas.com.

# RADIO AND POWER SYSTEM TERMINOLOGY

Please take a moment to familiarize yourself with these radio and power system terms. They will be used throughout this manual. A detailed explanation of the advanced terminology and features of your new radio system begins on page 31.

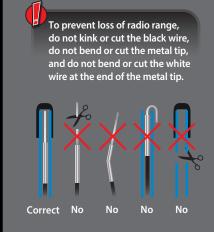
- 2.4GHz Spread Spectrum This model is equipped with the latest R/C technology. Unlike AM and FM systems that require frequency crystals and are prone to frequency conflicts, the TQi system automatically selects and locks onto an open frequency and offers superior resistance to interference and "glitching."
- **BEC** (Battery Eliminator Circuit) The BEC can either be in the receiver or in the ESC. This circuit allows the receiver and servos to be powered by the main battery pack in an electric model. This eliminates the need to carry a separate pack of 4 AA batteries to power the radio equipment.
- **Current** Current is a measure of power flow through the electronics, usually measured in amps. If you think of a wire as a garden hose, current is a measure of how much water is flowing through the hose.
- **ESC** (Electronic Speed Control) An electronic speed control is the electronic motor control inside the model. The XL-5 uses MOSFET power transistors to provide precise, digital proportional throttle control. Electronic speed controls use power more

- efficiently than mechanical speed controls so that the batteries run longer. An electronic speed control also has circuitry that prevents loss of steering and throttle control as the batteries lose their charge.
- **Frequency band** The radio frequency used by the transmitter to send signals to your model. This model operates on the 2.4GHz direct-sequence spread spectrum.
- **LiPo** Abbreviation for Lithium Polymer. Rechargeable LiPo battery packs are known for their special chemistry, which allows extremely high energy density and current handling in a compact size. These are high-performance batteries that require special care and handling. For advanced users only.
- mAh Abbreviation for milliamp hour, a measure of the capacity of the battery pack. The higher the number, the longer the battery will last between recharges.
- **Neutral position** The standing position that the servos seek when the transmitter controls are at the neutral setting.
- **NiCad** Abbreviation for nickel-cadmium. The original rechargeable hobby pack, NiCad batteries have very high current handling, high capacity, and can last up to 1000 charging cycles. Good charging procedures are required to reduce the possibility of developing a "memory" effect and shortened run times.
- NiMH Abbreviation for nickel-metal hydride. Rechargeable NiMH batteries offer high current handling and much greater resistance to the "memory" effect. NiMH batteries generally allow higher capacity than NiCad batteries. They can last up to 500 charge cycles. A peak charger designed for NiMH batteries is required for optimal performance.
- **Receiver** The radio unit inside your model that receives signals from the transmitter and relays them to the servos.
- **Resistance** In an electrical sense, resistance is a measure of how an object resists or obstructs the flow of current through it. When flow is constricted, energy is converted to heat and is lost.
- **Servo** Small motor unit in your model that operates the steering mechanism.

- **Transmitter** The hand-held radio unit that sends throttle and steering instructions to your model.
- **Trim** The fine-tuning adjustment of the neutral position of the servos, made by adjusting the steering trim knob on the face of the transmitter.
- **Thermal Shutdown Protection** Temperature sensing electronics are used in the ESC to detect overloading and overheating of the transistor circuitry. If excessive temperature is detected, the unit automatically shuts down to prevent damage to the electronics.
- **2-channel radio system** The TQi 2.4GHz radio system, consisting of the receiver, the transmitter, and the servos. The system uses two channels: one to operate the throttle and one to operate the steering.
- Voltage Voltage is a measure of the electrical potential difference between two points, such as between the positive battery terminal and ground. Using the analogy of the garden hose, while current is the quantity of water flow in the hose, voltage corresponds to the pressure that is forcing the water through the hose.

# IMPORTANT RADIO SYSTEM PRECAUTIONS

- Do not kink the receiver antenna wire. Kinks in the antenna wire will reduce range.
- DO NOT CUT any part of the receiver antenna wire. Cutting the antenna will reduce range.
- Extend the antenna wire in the model as far as possible for maximum range. It is not necessary to extend the antenna wire out of the body, but wrapping or coiling the antenna wire should be avoided.
- Do not allow the antenna wire to extend outside the body without the protection of an antenna tube, or the antenna wire may get cut or damaged, reducing range. It is recommended to keep the wire inside the body (in the antenna tube) to prevent the chance of damage.



# XL-5 Wiring Diagram **BATTERY** XL-5 ESC Motor + Positive - Negative

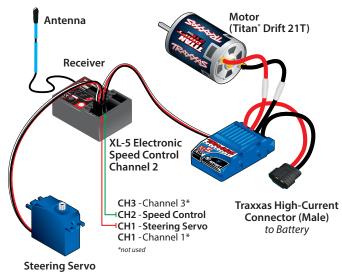
Your model is equipped with the TQi 2.4GHz transmitter with Traxxas Link™ Model Memory. The transmitter has two channels for controlling your throttle and steering. The receiver inside the model has 5 output channels. Your model is equipped with one servo and an electronic speed control.

# TRANSMITTER AND RECEIVER



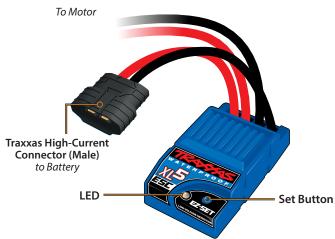
<sup>\*\*</sup> Accessory sensor expansion port for use with the Telemetry Expander Module (see Traxxas.com and included materials for more information)

# MODEL WIRING DIAGRAM



# XL-5 ELECTRONIC SPEED CONTROL

Channel 1



# INSTALLING TRANSMITTER BATTERIES

Your TQi 2.4GHz transmitter uses 4 AA batteries. The battery compartment is located in the base of the transmitter.



- 1. Remove the battery compartment door by pressing the tab and sliding the door open.
- 2. Install the batteries in the correct orientation as indicated in the battery compartment.
- 3. Reinstall the battery compartment door and snap it closed.
- Turn on the transmitter and check the status LED for a solid green light.

If the status LED flashes red, the transmitter batteries may be weak, discharged, or possibly installed incorrectly. Replace with new or freshly charged batteries. The status LED does not indicate the charge



level of the battery pack installed in the model. Refer to the Troubleshooting section on page 31 for more information on the transmitter status LED codes.

# SELECTING A CHARGER AND BATTERIES FOR YOUR MODEL

Your model does not include a battery or charger. The speed control in the model is compatible with both LiPo and NiMH batteries. One NiMH or 2s LiPo iD® battery equipped with a Traxxas High Current connector is required. **Use Traxxas iD® batteries with Traxxas iD® chargers for maximum performance and safer charging.** 

The following chart lists available Traxxas batteries for your model:

# LiPo Batteries with iD

2827X 3000mah 7.4v 2-Cell 20C LiPo Batt	ery
---	-----

2842X 5000mAh 7.4V 2-Cell 25C LiPo Battery

2843X 5800mAh 7.4V 2-Cell 25C LiPo Battery

2869X 7600mAh 7.4V 2-Cell 25C LiPo Battery

# NiMH Batteries with iD

2923X Battery, Power Cell, 3000mAh (NiMH, 7-C flat, 8.4V)

2940X Battery, Series 3 Power Cell, 3300mAh (NiMH, 7-C flat, 8.4V)

2950X Battery, Series 4 Power Cell, 4200mAh (NiMH, 7-C flat, 8.4V)

2960X Battery, Series 5 Power Cell, 5000mAh (NiMH, 7-C flat, 8.4V)

# **WARNING: FIRE HAZARD!**

Users of Lithium Polymer (LiPo) batteries must read the Warnings and Precautions beginning on page 4. You

MUST use a LiPo charger for LiPo batteries or battery damage with the potential for fire will result.

Make certain you choose the correct type of charger for the batteries you select. Traxxas recommends you choose a genuine Traxxas EZ-Peak iD charger for safer charging and maximum battery life and performance.

p					
Charger AC Powered	Part No.	NiMH Compatible	LiPo Compatible	Battery iD	Max. Cells
EZ-Peak Plus, 4 amps	2970	YES	YES	YES	3s
EZ-Peak Live, 12 amps	2971	YES	YES	YES	4s
EZ-Peak Dual, 8 amps	2972	YES	YES	YES	3s
EZ-Peak Live Dual, 26 amps	2973	YES	YES	YES	4s
EZ-Peak Plus 4s, 8 amps	2981	YES	YES	YES	4s
Charger USB-C Powered	Part No.	NiMH Compatible	LiPo Compatible	Battery iD	Max Cells
USB-C Balance Charger, 4 amps	2985	YES	YES	YES	3s



If the status LED doesn't light green, check the polarity of the batteries. Check rechargeable batteries for a full charge. If you see any other flashing signal from the LED, refer to the chart on page 31 to identify the code.



Use the Right Batteries
Your transmitter uses AA
batteries. Use new alkaline
batteries. Do not use
rechargeable AA cells to power
the TQi transmitter, as they will
not provide sufficient voltage
for optimum transmitter
performance.

Caution: Discontinue running your model at the first sign of weak batteries (flashing red light) to avoid losing control.





# Battery iD

Traxxas recommended battery packs are equipped with Traxxas Battery iD. This exclusive feature allows Traxxas battery chargers (sold separately) to automatically recognize connected battery packs and optimize the charge settings for the battery. This eliminates the need to worry over charger settings and menus for an easier and safer charging solution. Visit Traxxas.com to learn more about this feature and available Traxxas iD chargers and batteries.

# REMOVING AND INSTALLING THE BODY

Your Ford Mustang includes an innovative latching system for securing the body to the chassis.

# To remove the body for chassis access:

- 1. Pull forward on the front latch while pushing up on the body to release it from the front body mount.
- Repeat for the rear latch to release the body from the rear body mount.
- 3. Lift the body straight up from the chassis.

# To reinstall the body on the chassis:

- 1. Align the pegs on the body posts with the holes in the front and rear body mounts on the chassis.
- 2. Press down on the body until the latches snap into place.



# INSTALLING THE BATTERY PACK

Install the battery pack with the battery wires facing the front of the model. Swing the battery hold down towards the chassis and snap (lock) the end into the front hold-down retainer.

**Note:** The battery hold-down can be rotated on its pivot to accommodate different height battery packs.



# The Traxxas High-Current Connector

Your model is equipped with the Traxxas High-Current Connector. Standard connectors restrict current flow and are not capable of delivering the power needed to maximize the output of the XL-5. The Traxxas connector's

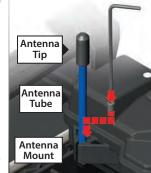


gold-plated terminals with large contact surfaces ensure positive current flow with the least amount of resistance. Secure, long-lasting, and easy to grip, the Traxxas connector is engineered to extract all the power your battery has to give.

# SETTING UP THE ANTENNA

The receiver antenna has been set up and installed from the factory. The antenna is secured by a 3x4mm set screw. To remove the antenna tube, simply remove the set screw with the included 1.5mm wrench.

When reinstalling the antenna, first slide the antenna wire into the bottom of the antenna tube until the white tip of the antenna is at the top of the tube under the black cap. Next, insert the antenna tube into the mount while making sure that the



antenna wire is in the slot in the antenna mount; then, install the set screw next to the antenna tube. Use the supplied 1.5mm wrench to tighten the screw just until the antenna tube is securely in place. Do not over tighten. Do not bend or kink the antenna wire! See the side bar for more information. Do not shorten the antenna tube.



# RADIO SYSTEM CONTROLS



# TRAXXAS HAND BRAKE

The transmitter is equipped with a **Hand Brake** button that can be used to apply instant braking force to the rear wheels. It will lock the rear wheels momentarily to allow the rear tires to break traction and make it easier for the car to begin rotating and setting up to drift around a turn.

# RADIO SYSTEM RULES

Always turn your transmitter on first and off last. This procedure
will help to prevent your model from receiving stray signals
from another transmitter, or other source, and running out of
control. Your model has electronic fail-safes to prevent this type of
malfunction, but the first, best defense against a runaway model is
to always turn the transmitter on first and off last.



- Always use new batteries for the radio system. Weak batteries will limit the radio signal between the receiver and the transmitter. Loss of the radio signal can cause you to lose control of your model.
- In order for the transmitter and receiver to bind to one another, the receiver in the model must be turned on within 20 seconds of turning on the transmitter. The transmitter LED will flash fast red, indicating a failure to link. If you miss it, simply turn off the transmitter and start over.
- Always turn on the transmitter before plugging in the battery.

# RADIO SYSTEM BASIC ADJUSTMENTS

# Steering Trim

Turn the steering trim knob to precisely set the steering neutral point so that the vehicle will drive straight ahead. **Note:** The vehicle must be stationary with no throttle or steering input for 5 seconds before adjusting steering trim.

# **Steering Angle**

Turn the Multi-Function knob to adjust the maximum steering angle. Out of the box, the steering angle is set to 50% to make the car easier to drift on smooth, low-traction



surfaces. To increase the steering angle, turn the Multi-Function knob clockwise; to reduce the steering angle, turn the knob counterclockwise. **Note:** This only limits steering input by the user from the transmitter. Traxxas Stability Management (TSM) will still use the full steering range as intended. See page 21 for more information on drifting and the use of this setting.



Make certain the model's receiver antenna is properly installed before operating your model. See "Setting up the Antenna." Failure to properly install the receiver antenna will result in greatly reduced radio range and potential loss of control.



Remember, always turn the transmitter on first and off last to avoid damage to your model.



Stop immediately at the first sign of weak batteries. Never turn the transmitter off when the battery pack is plugged in. The model could run out of control.



# **USING THE RADIO SYSTEM**

The TQi Radio System has been pre-adjusted at the factory. The adjustment should be checked before running the model in case of movement during shipping. Here's how:

- Turn the transmitter switch on. The status LED on the transmitter should be solid green (not flashing).
- Elevate the model on a block or a stand so that all the tires are off the ground. Make sure your hands are clear of the moving parts of the model.
- 3. Plug the battery pack in the model into the speed control.
- 4. Press and release the EZ-Set button on the speed control to turn the model on. The speed control's LED will glow red. To turn the speed control off, press the EZ-Set button until the LED turns off. Note: If the LED shines green after the speed control is turned on, Low-Voltage Detection is activated. This may cause poor performance from NiMH battery packs. Make sure to turn the Low-Voltage Detection on when using LiPo batteries. Never use LiPo batteries while Low-Voltage Detection is turned off. See page 18 for more information.
- Turn the steering wheel on the transmitter back and forth and check for rapid operation of the steering servo. Also, check that the steering mechanism is not loose or binding. If the steering operates slowly, check for weak batteries.
- 6. When looking down at the model, the front wheels should be pointing straight ahead. If the wheels are turned slightly to the left or right, allow the vehicle to sit stationary with no throttle or steering input for 5 seconds. Slowly adjust



the steering trim control on the transmitter until the wheels are pointing straight ahead.

- Gently operate the throttle trigger to ensure that you have forward and reverse operation, and that the motor stops when the throttle trigger is at neutral. Warning: Do not apply full throttle in forward while the model is elevated.
- 8. Once adjustments are made, turn off the receiver on your model, followed by the hand-held transmitter.

# Range-Testing the Radio System

Before each running session with your model, you should range-test your radio system to ensure that it operates properly.

- 1. Turn on the radio system and check its operation as described in the previous section.
- 2. Have a friend hold the model. Make sure hands and clothing are clear of the wheels and other moving parts on the model.
- 3. Walk away from the model with the transmitter until you reach the farthest distance you plan to operate the model.
- 4. Operate the controls on the transmitter once again to be sure that the model responds correctly.
- 5. Do not attempt to operate the model if there is any problem with the radio system or any external interference with your radio signal at your location.

# **Higher Speeds Require Greater Distance**

The faster you drive your model, the more quickly it will near the limit of radio range. At 60mph, a model can cover 88 feet every second! It's a thrill, but use caution to keep your model in range. If you want to see your model achieve its maximum speed, it is best to position yourself in the middle of the car's running area, not the far end, so you drive the car towards and past your position. In addition to maximizing the radio's range, this technique will keep your model closer to you, making it easier to see and control.

No matter how fast or far you drive your model, always leave adequate space between you, the model, and others. Never drive directly toward yourself or others.

# **TQi Binding Instructions**

For proper operation, the transmitter and receiver must be electronically "bound." This has been done for you at the factory. Should you ever need to re-bind the system or bind to an additional transmitter or receiver, follow these instructions. Note: The receiver must be connected to a 4.8-6.0v (nominal) power source for binding, and the transmitter and receiver must be within 5 feet of each other.

- Press and hold the transmitter's SET button as you switch the transmitter on. The transmitter's LED will flash red slowly. Release the SET button.
- Press and hold the receiver's LINK button as you switch on the speed control (by pressing the EZ-Set button). Release the LINK button.
- When the transmitter and receiver's LEDs turn solid green, the system is bound and ready for use. Confirm that the steering and throttle operate properly before driving your model.



# DRIFT-TUNED TRAXXAS STABILITY MANAGEMENT (TSM DRIFT)



Your vehicle is equipped with Drift-Tuned Traxxas Stability Management (TSM Drift). Drift-Tuned Traxxas Stability Management or

TSM Drift makes millisecond-fast steering and throttle adjustments to help maintain precise drift angles and prevent spin-outs. TSM Drift is turned on by default and we recommend that you experiment with TSM Drift adjustments to tune for different surface conditions and driving styles.

# TRAXXAS LINK<sup>™</sup> WIRELESS MODULE

The TQi transmitter is equipped with the Traxxas Link™ Wireless Module. Download the Traxxas Link App from the Apple App Store™ or on Google Play™ and follow the on-screen directions to pair your device with the Traxxas Link Wireless Module and gain access to the Drift Tuning functions. Open the app, touch the Garage button, and then touch the Traxxas Stability Management button.





# **DRIFT PROFILE SELECTION**

Your TSM receiver has three (3) preset drift profiles to assist with acceleration and drifting while driving your model.

# TSM Drift (Profile 1 - default setting):

The TSM Drift Profile activates both electronic throttle and steering aids to make it easier to drift. As you rotate the car in a turn, TSM Drift modulates steering angle and throttle (rear wheel speed) to help maintain the desired drift angle. **Steering Reflex** controls how much steering input TSM provides from zero to 100%. **Throttle Reflex** controls how much throttle input TSM provides from zero to 100%. Adjust the sliders to see how much TSM you need for your driving style and the surface conditions. **Spin-Out Assist** is a function that quickly reduces throttle and provides maximum steering input to help prevent a spin out when detected.



# TSM (Profile 2):

Profile 2 is very similar to TSM Drift except in this mode, TSM does not provide any throttle input. This mode is similar to the TSM mode commonly used on many Traxxas models to maintain stability and make the model easier to drive on loose surfaces.



# Gyro (Profile 3):

TSM operates like a traditional drift gyro for drivers who are used to driving with a gyro. The car will be more difficult to drift without the assistance of TSM. Use the slider to adjust the gyro gain from 0 to 100%.





# Fail-Safe

Your Traxxas radio system is equipped with a builtin fail-safe function that returns the throttle to its last saved neutral position in the event of a signal loss. The LED on the transmitter and the receiver will rapidly flash red when the failsafe mode is activated. If fail-safe activates while you are operating your model, determine the reason for signal loss and resolve the problem before operating your model again.

# ADJUSTING THE ELECTRONIC SPEED CONTROL

# XL-5 Specifications

Input Voltage 4-7 cells NiMH; 2S LiPo

1.23"W x 2.18"L x 0.75"H

Weiaht 2.0 ounces / 57 grams

**Motor Limit** 15-turns (540 Size) / 12-turns (550 Size)

**BEC** Voltage 6.0 VDC

**Power Wire** 14 Gauge / 5"

Input Harness Wire 26 Gauge / 9"

**Thermal Protection** Thermal Shutdown

Low-Voltage Detection Yes (User Enabled)

# XL-5 Battery Settings (Low-Voltage Detection Setting)

The XL-5 electronic speed control is equipped with built-in Low-Voltage Detection. The Low-Voltage Detection circuitry constantly monitors the battery voltage. When the battery voltage begins to reach the minimum recommended discharge voltage threshold for LiPo battery packs, the XL-5 will limit the power output to 50% throttle. When the battery voltage attempts to fall below the minimum threshold, the XL-5 will shut down all motor output. The LED on the speed control will slowly blink red, indicating a low-voltage shutdown. The XL-5 will stay in this mode until a fully charged battery is connected.

When you turn your model on, the XL-5 speed control's status LED will glow green, indicating that Low-Voltage Detection is activated to prevent over-discharging of LiPo batteries. LiPo batteries are intended only for the most advanced users that are educated on the risks associated with LiPo battery use.



# **WARNING: FIRE HAZARD!**

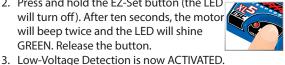
Do not use LiPo batteries in this vehicle with Low-Voltage Detection disabled.

# Verify that Low-Voltage Detection is ACTIVATED:

- 1. Turn on the transmitter (with the throttle at neutral).
- 2. Connect a fully charged battery pack to the XL-5.
- 3. Press and release the E7-Set button to turn the XI-5 on. If the LED is solid red, then the Low-Voltage Detection is DISABLED (not safe to use LiPo batteries). If the LED is solid green, then Low-Voltage Detection is ACTIVATED.

# To activate Low-Voltage Detection (LiPo setting):

- 1. Make sure the LED on the XL-5 is on and RED.
- 2. Press and hold the EZ-Set button (the LED will turn off). After ten seconds, the motor will beep twice and the LED will shine GREEN. Release the button.





# To disable Low-Voltage Detection (NiMH setting):

- 1. Make sure the LED on the XL-5 is on and GREEN.
- 2. Press and hold the EZ-Set button (the LED will turn off). After ten seconds, the motor will beep three times and the LED will shine RED. Release the button.

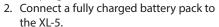




3. Low-Voltage Detection is now DISABLED.

**XL-5 Setup Programming** (Calibrating your ESC and transmitter) Read through all of the programming steps before you begin. If you get lost during programming or receive unexpected results, simply unplug the battery, wait a few seconds, plug the battery pack in, and start over.

1. Disconnect one of the motor wires between the XL-5 and the motor. This is a precaution to prevent runaway when the speed control is turned on before it is programmed.



- 3. Turn on the transmitter (with the throttle at neutral).
- 4. Press and hold the EZ-Set button (A). The LED will first turn green and then red. Release the button.
- 5. When the LED blinks RED ONCE, pull the throttle trigger to the full throttle position and hold it there (B).
- 6. When the LED blinks RED TWICE, push the throttle trigger to the full reverse and hold it there (C).
- 7. When the LED blinks GREEN ONCE, programming is complete. The LED will then shine green or red (depending on Low-Voltage Detection setting), indicating the XL-5 is on and at neutral (D).









# XL-5 Operation

To operate the speed control and test the programming, reconnect the motor wires and place the vehicle on a stable block or stand so that all of the driven wheels are off the ground.

Note that in steps 1-8 below, Low-Voltage Detection is ACTIVATED (factory default) and the LED shines green. If Low-Voltage Detection is DISABLED, the LED will shine red instead of green in steps 1-8 below. Never use LiPo batteries while Low-Voltage Detection is disabled.

- With the transmitter on, press and release the EZ-Set button. The LED will shine GREEN. This turns the XL-5 on. If you press and release too quickly, you may hear the steering servo jump but the LED may not stay on. Simply press the button again until the LED shines GREEN and then release.
- 2. Apply forward throttle. The LED will turn off until full throttle power is reached. At full throttle, the LED will shine GREEN.
- Move the trigger forward to apply the brakes. Note that braking control is fully proportional. The LED will turn off until full braking power is reached. At full brakes, the LED will shine GREEN.
- 4. Return the throttle trigger to neutral. The LED will shine GREEN.
- 5. Move the throttle trigger forward again to engage reverse (Profile #1). The LED will turn off. Once full reverse power is reached, the LED will shine GREEN.
- 6. To stop, return the throttle trigger to neutral. Note that there is no programmed delay when changing from reverse to forward. Use caution to avoid slamming the speed control from reverse to forward. On high-traction surfaces, this could result in transmission or driveline damage.
- 7. To turn the XL-5 off, press and hold the EZ-Set button for 1½ seconds or until the green LED turns off.
- 8. The XL-5 is equipped with thermal shutdown protection to guard against overheating caused by excessive current flow. If the operating temperature exceeds safe limits, the XL-5 will automatically shut down. The LED on the face of the XL-5 will rapidly blink red, even if the throttle trigger is moved back and forth. Once the temperature returns to a safe level, the XL-5 will once again function normally.

# XL-5 Profile Selection

The speed control is factory set to Race Mode (100% Forward, 100% Brakes, No Reverse). For 100% forward, reverse, and brakes (Sport Mode) or to allow 50% power (patented Training Mode), follow these steps. The speed control should be connected to the receiver and the transmitter adjusted as described previously. The profiles are selected by entering the programming mode.

# **Profile Description**

Profile #1 (Sport Mode): 100% Forward, 100% Brakes, 100% Reverse Profile #2 (Race Mode): 100% Forward, 100% Brakes, No Reverse Profile #3 (Training Mode): 50% Forward, 100% Brakes, 50% Reverse

# **Selecting Sport Mode**

(Profile #1: 100% Forward, 100% Brakes, 100% Reverse)

- Connect a fully charged battery pack to the XL-5 and turn on your transmitter.
- 2. With the XL-5 off, press and hold the EZ-Set button until the LED turns solid green, then solid red and then begins blinking red (indicating the Profile numbers).
- 3. When the LED blinks RED ONCE, release the EZ-Set button.
- The LED will blink and then turn solid green (Low-Voltage Detection ACTIVE) or red (Low-Voltage Detection DISABLED). The model is ready to drive.

# **Selecting Race Mode**

(Profile #2: 100% Forward, 100% Brakes, No Reverse)

- 1. Connect a fully charged battery pack to the XL-5 and turn on your transmitter.
- With the XL-5 off, press and hold the EZ-Set button until the LED turns solid green, then solid red and then begins blinking red (indicating the Profile numbers).
- When the LED blinks RED TWICE, release the EZ-Set button.
- The LED will blink and then turn solid green (Low-Voltage Detection ACTIVE) or red (Low-Voltage Detection DISABLED). The model is ready to drive.



Patented Training Mode (Profile #3) reduces forward and reverse throttle by 50%. Training Mode is provided to reduce the power output, allowing beginning drivers to better control the model. As driving skills improve, simply change to Sport or Race Mode for full-power operation.

# ADJUSTING THE ELECTRONIC SPEED CONTROL



Throttle Neutral Protection
The XL-5 speed control features
Throttle Neutral Protection,
which prevents the model from
suddenly accelerating if the
speed control is switched on
while the transmitter's trigger is
being held. When the trigger is
returned to neutral, the XL-5 will
operate properly.

# **Selecting Training Mode**

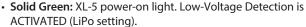
(Profile #3: 50% Forward, 100% Brakes, 50% Reverse)

- Connect a fully charged battery pack to the XL-5 and turn on your transmitter.
- 2. With the XL-5 off, press and hold the EZ-Set button until the LED turns solid green, then solid red and then begins blinking red (indicating the Profile numbers).
- 3. When the LED blinks RED THREE TIMES, release the EZ-Set button.
- The LED will blink and then turn solid green (Low-Voltage Detection ACTIVE) or red (Low-Voltage Detection DISABLED). The model is ready to drive.

**Note:** If you missed the mode you wanted, keep the EZ-Set button pressed down and the blink cycle will repeat until the button is released and a Mode is selected.

# **LED Codes and Protection Modes**







 Solid Red: XL-5 power-on light. Low-Voltage Detection is DISABLED (NiMH setting). Never use LiPo batteries while Low-Voltage Detection is disabled.



 Fast Blinking Red: The XL-5 is equipped with thermal shutdown protection to guard against overheating caused by excessive current flow. If the operating temperature exceeds safe limits, the XL-5 will automatically shut down. Let the XL-5 cool. Make sure your model is properly geared for the conditions.



• Slow Blinking Red (when Low-Voltage Detection is activated): The XL-5 has entered Low-Voltage Protection. When the battery voltage begins to reach the minimum recommended discharge voltage threshold for LiPo battery packs, the XL-5 will limit the power output to 50% throttle. When the battery voltage attempts to fall below the minimum threshold, the XL-5 will shut down all motor output. The LED on the speed control will slowly blink red, indicating a low-voltage shutdown. The XL-5 will stay in this mode until a fully charged battery is connected.



• Fast Blinking Green: The XL-5's LED will blink fast green if the speed control is not receiving a signal. Make certain the speed control is properly plugged into the receiver and the transmitter is switched on.

# DRIVING YOUR MODEL

# DRIFTING PERFORMANCE TIPS

Drifting is a driving technique that prioritizes style over speed and lap times. Slow down when driving; small inputs of throttle, brake, and steering work best. Below are several tips to practice. The more you do it, the better you will be.

- · Use small, smooth steering and throttle inputs.
- Experiment with the Multi-Function knob to find a steering angle setting that best suits your driving style. If the car is frequently pushing into the turn (going straight with the wheels turned), reduce the steering angle. If the car is performing well and you need more driver control, increase the steering angle.



# 1. Entering the drift

- Slow down as you enter the turn.
- Use throttle input or the brake/hand brake to start rotation.
- · Turn into the corner.
- TSM will automatically countersteer to maintain the drift angle.



# 2. Maintaining the drift

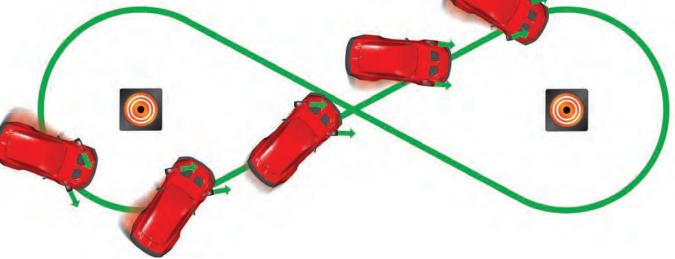
- Use combined throttle and steering inputs to maintain the drift.
- TSM Drift will increase or decrease throttle and steering as needed to maintain the drift angle.
- As TSM is working, you may notice that the front wheels will be turned more than your steering input. You may also hear TSM modulating the throttle.



# 3. Exiting the drift

- Reduce steering input while reducing throttle.
- Countersteer to change vehicle direction for the next corner.

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# DRIVING PRECAUTIONS

Here are some important precautions to keep in mind.

- Allow the model to cool for a few minutes between runs. This is particularly important when using high-capacity (2400mAh and above) battery packs that allow extended periods of running. Monitoring temperatures will extend the lives of the batteries and motor.
- Do not continue to operate the model with low batteries or you
  could lose control of it. Indications of low battery power include
  slow operation and sluggish servos (slow to return to center). Stop
  immediately at the first sign of weak batteries. When the batteries
  in the transmitter become weak, the red power light will begin to
  flash. Stop immediately and install new batteries.
- Do not drive the model at night, on public streets, or in large crowds of people.
- If the model becomes stuck against an object, do not continue to run the motor. Remove the obstruction before continuing. Do not push or pull objects with the model.
- Because the model is controlled by radio, it is subject to radio interference from many sources beyond your control. Since radio interference can cause momentary losses of control, allow a safety margin of space in all directions around the model in order to prevent collisions.
- Use good, common sense whenever you are driving your model.
   Intentionally driving in an abusive and rough manner will only result in poor performance and broken parts. Take care of your model so that you can enjoy it for a long time to come.
- Driving or drifting with your model indoors may cause damage to hardwood, vinyl or laminate flooring.
- When using optional pinions for top speed running, limit your driving to paved surfaces only. Repetitive starting and stopping and extensive drifting around turns will create excess heat and overheat the ESC and/or motor. Running in grass and off-road could also cause excessive loads on the electrical system.
- The Titan Drift 550 21T motor will benefit from a short break-in period to ensure optimum performance and longer motor life.

For the first battery pack, use the stock installed pinion gear and drive smoothly on a flat, paved surface. Accelerate smoothly (avoiding full throttle starts), with most of the driving being done at higher speeds. This will help ensure that the motor provides the best performance and longest life.

# **About Run Time**

A large factor affecting run time is the type and condition of your batteries. The milliamp hour (mAh) rating of the batteries determines how large their "fuel tank" is. A 3000 mAh battery pack will theoretically run twice as long as a 1500 mAh sport pack. Because of the wide variation in the types of batteries that are available and the methods with which they can be charged, it's impossible to give exact run times for the model.

Another major factor that affects run time is how the model is driven. Run times may decrease when the model is driven repetitively from a stop to top-speed and with repetitive hard acceleration.

# **Tips for Increasing Run Time**

- Use batteries with the highest mAh rating you can purchase.
- Use a high-quality peak-detecting charger.
- Read and follow all maintenance and care instructions provided by the manufacturer of your batteries.
- Vary your speed. The Titan Drift 550 21T is a fan cooled motor, therefore moderate to top-speed running helps reduce motor temperatures.
- Lower your gear ratio. Installing a smaller pinion gear will lower your gear ratio, causing less power draw from the motor.
- Maintain your model. Do not allow dirt or damaged parts to cause binding in the drivetrain. Keep the motor clean and the motor bushings lightly lubricated.

# mAh Ratings and Power Output

The mAh rating of the battery can affect your top speed performance. The higher capacity battery packs experience less voltage drop under heavy load than low mAh rated packs. The higher voltage potential allows increased speed until the battery begins to become discharged.

# RUNNING IN WET CONDITIONS

Your new Traxxas model is designed with water-resistant features to protect the electronics in the model (receiver, servos, electronic speed control). This gives you the freedom to have fun driving your model through puddles, wet grass, snow, and through other wet conditions. Though highly water resistant, the model should not be treated as though it is submersible or totally, 100% waterproof. Water resistance applies only to the installed electronic components. Running in wet conditions requires additional care and maintenance for the mechanical and electrical components to prevent corrosion of metal parts and maintain their proper function.

# **Precautions**

- Without proper care, some parts of your model can be seriously damaged due to contact with water. Know that additional maintenance procedures will be required after running in wet conditions in order to maintain the performance of your model. Do not run your model in wet conditions if you are not willing to accept the additional care and maintenance responsibilities.
- Not all batteries can be used in wet environments. Consult your battery manufacturer to see if their batteries can be used in wet conditions.
- The Traxxas TQi 2.4GHz transmitter is not water resistant. Do not subject it to wet conditions such as rain.
- Do not operate your model during a rain storm or other inclement weather where lightning may be present.
- Do NOT allow your model to come in contact with salt water (ocean water), brackish water (between fresh water and ocean water), or other contaminated water. Salt water is highly conductive and highly corrosive. Use caution if you plan to run your model on or near a beach.
- Even casual water contact can reduce the life of your motor.
   Special care must be taken to modify your gearing and/or your driving style in wet conditions to extend the life of the motor (details follow).

# **Before Running Your Vehicle in Wet Conditions**

- Consult the section "After Running Your Vehicle in Wet Conditions" before proceeding. Make sure you understand the additional maintenance required with wet running.
- Confirm that the receiver box O-ring and cover are installed correctly and secure. Make sure the screws are tight and the blue O-ring is not visible protruding from the edge of the cover.
- 3. Confirm that your batteries can be used in wet conditions.

# **Motor Precautions**

- Titan Drift motor life can be greatly reduced in mud and water. If the motor gets excessively wet or submerged, use very light throttle (run the motor slowly) until the excess water can run out. Applying full throttle to a motor full of water can cause rapid motor failure. Your driving habits will determine motor life with a wet motor. Do not submerge the motor under water.
- Do not gear the motor by temperature when running in wet conditions. The motor will be cooled by water contact and will not give an accurate indication of appropriate gearing.

# After Running Your Vehicle in Wet Conditions

- 1. Remove the batteries.
- Rinse excess dirt and mud off the car with low-pressure water, such as from a garden hose. Do NOT use pressure washer or other high-pressure water. Avoid directing water into the bearings, transmission, etc.
- 3. Blow off the car with compressed air (optional, but recommended). Wear safety glasses when using compressed air.
- 4. Remove the wheels from the car.
- Spray all the bearings, drivetrain, and fasteners with WD-40° or similar water displacing light oil.
- 6. Let the car stand or you may blow off with compressed air. Placing the car in a warm, sunny spot will aid drying. Trapped water and oil will continue to drip from the car for a few hours. Place it on a towel or piece of cardboard to protect the surface underneath.
- 7. As a precautionary step, remove the sealed receiver box cover. While unlikely, humidity or tiny amounts of moisture or condensation may enter the receiver box during wet running. This can cause long-term problems with the sensitive electronics in the receiver. Removing the receiver box cover during storage allows the air inside to dry. This step can improve the long-term reliability of the receiver. It is not necessary to remove the receiver or unplug any of the wires.

- 8. Additional Maintenance: Increase your frequency of disassembly, inspection, and lubrication of the following items. This is necessary after extended wet use or if the vehicle will not be used for an extended period of time (such as a week or longer). This additional maintenance is needed to prevent any trapped moisture from corroding internal steel components.
  - Stub axle housing bearings: Remove, clean, and re-oil the bearings.
  - Titan Drift motor: Remove the motor, clean with aerosol motor cleaner, and re-oil the bushings with lightweight motor oil. Be sure to wear eye protection when using spray aerosol cleaners.

# RECEIVER BOX: MAINTAINING A WATERTIGHT SEAL

# Removing and Installing Radio Gear

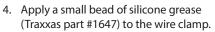
The unique design of the receiver box allows the removal and installation of the receiver without losing the ability to maintain a watertight seal in the box. The patent-pending wire clamp feature gives you the ability to also install aftermarket radio systems and maintain the watertight features of the receiver box.

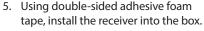
# Removing the Receiver

- 1. To remove the cover, remove the three 2.5x10mm socket-head cap screws.
- 2. To remove the receiver from the box, simply lift it out and set to the side.
- 3. Unplug the servo cables from the receiver and remove the receiver.

# Receiver Installation

- Always install the wires into the receiver box before installing the receiver.
- 2. Install the antenna wire and the servo cables into the receiver box.
- Arrange the wires neatly using the wire guides in the receiver box. The excess wire will be bundled inside the receiver box. Label which wire is for which channel.









Note: For best performance, it is recommended that the receiver be installed in the original orientation as shown.

- 6. Plug the wires into the receiver. Refer to page 12 for the wiring diagram.
- Make sure the box light pipe is aligned with the receiver LED. Make sure the O-ring is properly seated into the groove in the receiver box so that the cover will not pinch it or damage it in any way.



- 8. Install the cover and tighten the three 2.5x10mm socket-head cap screws securely.
- 9. Inspect the cover to make sure that the O-ring seal is not visible.

# ADJUSTING YOUR MODEL

Once you become familiar with driving your model, you might need to make adjustments for better driving performance

# **Adjusting Gear Mesh**

Incorrect gear mesh is the most common cause of stripped spur gears. Your model includes a fixed gear positioning system to simplify the process and ensure proper gear mesh settings. Access the gears by removing the four 3x12mm button-head cap screws from the gear cover; remove the gear cover. Remove the motor/motor plate assembly from the chassis.

To set the gear mesh, use the chart to the left to identify the screw positions on the motor plate (A - K) that correspond with the chosen



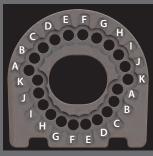
motor pinion gear size. Remove the two screws from the motor/motor plate and reinstall in the corresponding positions; reinstall the motor/motor plate assembly in the chassis.

# **Fine Tuning the Shocks**

The four shocks on the model greatly influence its handling. Whenever you rebuild your shocks or make any changes to the pistons, springs, or oil, always make changes to them in pairs (front or rear). Piston selection depends on the range of oil viscosities that you have available. For example, using a two-hole piston with a lightweight oil will, at one point, give you the same damping as a three-hole piston with heavier oil. We recommend using the two-hole pistons with a range of oil viscosities from 10W to 50W (available from your hobby shop).



The thinner viscosity oils (30W or less) flow more smoothly and are more consistent, while thicker oils provide more damping. Use only 100% pure silicone shock oil to prolong seal life. From the factory, shock oil is set to 20W in the front and rear shocks. The model's ride height can be adjusted by adding or removing the clip-on, spring pre-load spacers. Adjust the ride height so that the suspension arms are slightly above being parallel to the ground. Observe how the model handles in turns. Proper set-up will add stability and help prevent spin outs. Experiment with different springs and shock oils to find what works best for your current track conditions.



Screw Positions	Pinion Gear Size*	Pinion Gear Size**	Pinion Gear Size <sup>†</sup>	Pinion Gear Size‡
Α	34-T	27-T	19-T	17-T
В	35-T	28-T	20-T	18-T
С	-	29-T	21-T	19-T
D	-	30-T	22-T	20-T
E	-	31-T	23-T	21-T
F	-	32-T	24-T	22-T
G	-	33-T	25-T	23-T
н	-	34-T	26-T	24-T
1	-	35-T	27-T	25-T
J	-	-	28-T	26-T
К	-	-	29-T	27-T

for use with 55-T spur gear only for use with 62-T spur gear only for use with 70-T spur gear only for use with 72-T spur gear only

# ADJUSTING YOUR MODEL

Gearing Compatibility Chart: The chart below shows a full range of gear combinations acceptable for this model. This does NOT imply that these gear combinations should be used. Over-gearing (bigger pinions, smaller spurs) can overheat and damage the motor and/or speed control.

	Spur Gear		
		72	
	17	4.24	
	18	4.00	
	19	3.79	
ar	20	3.60	
Pinion Gear	21	3.43	
nior	22	3.27	
₫	23	3.13	
	24	3.00	
	25	2.88	
	26	2.77	
	27	2.67	

Out of box setup, recommended for most running, 7-cell NiMH or 25 LiPo

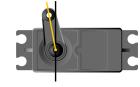
Usable gearing range for 7-cell NiMH or 2s LiPo

Not recommended

# **Centering Your Servo**

If the trim controls on your transmitter seem off, you may need to re-center your servo. Additionally, whenever your servo has been removed for service or cleaning, it must be re-centered prior to installation in the model.

- 1. Disconnect the servo horn from the steering servo.
- 2. Connect the steering servo to channel 1 on the receiver. Connect the electronic speed control (ESC) to channel 2.
- 3. Place fresh "AA" batteries in the transmitter and turn the transmitter power switch on.
- 4. Turn the steering trim adjustment on the transmitter to the center "0" position.
- Elevate the model on a block or stand so that all of the tires are
  off the ground. Connect a fresh battery pack to the speed control
  and turn on the ESC (see page 18). The servo will automatically
  jump to its center position.
- 6. Turn off the power to the model followed by the transmitter. The servo horn is now ready to be installed.
- 7. Install the servo horn onto the servo output shaft. Be careful not to move the shaft. The servo horn should be aligned one spline counterclockwise from perpendicular alignment with the servo case (not the chassis).



Readjust the ESC as described in the "Adjusting the Electronic Speed Control" section.

# **Motors and Gearing**

There are two different types of aftermarket motors that can be purchased for your model, stock and modified. Stock motors all have the same wire thickness and number of turns around the armature as governed by sanctioned racing organizations. They are inexpensive and widely available. Modified motors are more expensive, may feature ball bearings, and come in a variety of wire thicknesses and the number of turns of wire on the armature. The fewer number of turns of wire on the armature, the more powerful the motor will be.

One of the more significant advantages to your model's transmission is the extremely wide range of available gear ratios. It can be geared low enough to run extremely hot, modified motors. Modified motors should be geared lower (higher numerically) than stock motors because they reach their maximum power at higher rpms. A modified motor that is geared incorrectly can actually be slower than a correctly-geared, stock motor. Use the following formula to calculate the overall ratio for combinations not listed on the gear chart:

If you are worried that you might be over-geared, check the temperature of the battery pack and motor. If the battery is extremely hot, and/or the motor is too hot to touch, your model is probably over-geared. If you are not able to run your model for at least four minutes before the battery dies, then change to a lower gear ratio. This temperature test assumes that the model is close to factory stock weight and operates freely with no excessive friction, dragging, or binding, and the battery is fully charged and in good condition.

The model is equipped with a Titan Drift 550 21T motor. The gear combination that comes stock on the model provides good overall acceleration and top speed. If you want more top speed and less acceleration, install optional high-speed gearing (more teeth). If you want more acceleration and less top speed, use a smaller optional pinion gear (optional gearing not included).

Another option for more power is to swap to the Titan 12T motor (part #3785, sold separately). The Titan 12T motor is a direct fit with no modifications necessary. Keep in mind that the more powerful the motor, the less battery run time you will have.

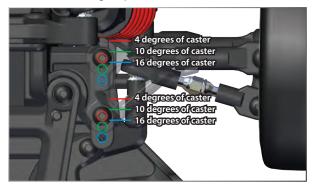
The Titan Drift 550 21T motor is equipped with an integrated cooling fan that is effective during medium to high-speed operation. The gearbox is specially vented to cool the motor.

Repetitive starting and stopping over short distances creates excess heat and will not allow the fan to cool the motor properly. For this type of driving, smaller pinion gears are recommended to reduce load on the motor. See the guide to the right.

# CHASSIS ADJUSTABILITY

# **Caster Angle**

Caster adjustment can be used to influence the understeer/oversteer handling characteristics of the vehicle. Increasing the caster angle will improve straight line stability and lock the car into higher angle drifts. Increase the caster angle by moving the upper arms rearward to the 10 or 16 degree position (see below).



# **Bumpsteer**

Bump steer refers to unwanted change in the steering angle of the front wheels as the suspension travels up and down. It can result in unstable and unpredictable handling. Adjust the bump steer by adding shims between the steering rod and the steering block. Bump steer should be corrected any time the caster angle is adjusted.



Use with 4 degrees of caster



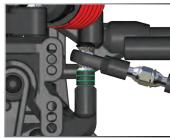
Use with 10 degrees of caster



Use with 16 degrees of caster

# Ackerman

Ackerman is the difference in the steering angle from the left to the right tires to make up for the difference in the turning radius allowing the tires to roll smoothly. Adjust the ackerman angle by adding or removing spacers between the steering links and the drag link. Adding spacers will reduce ackerman; removing spacers will increase ackerman. Increased ackerman will make the car easier to drive for smoother drifts. Reduced ackerman will make the car feel more direct and responsive; it will also increase difficulty of driving but may be better suited for small technical tracks.

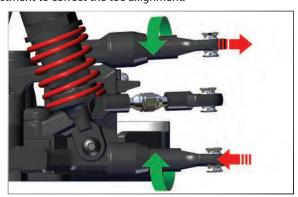


Minimum Ackerman

Maximum Ackerman

# **Front and Rear Camber**

Adjusting the camber will alter the tire contact patch. This makes the vehicle more stable over bumps and reduces traction on smooth surfaces. To increase the camber on the front suspension, shorten the upper arm or lengthen the lower arm. To increase the camber on the rear suspension, shorten the upper link. The steering links will need adjustment to correct the toe allignment.

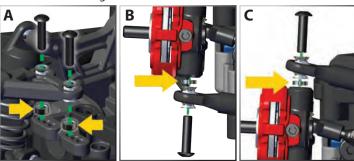


# ADJUSTING YOUR MODEL

# Roll center

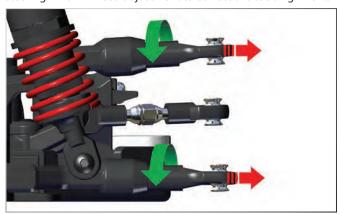
Roll center refers to the virtual axis around which the chassis will roll when subjected to cornering forces. The roll center of the vehicle is adjusted by altering the angles of the suspension arms relative to each other. Raising the roll center will increase the roll stiffness of the vehicle and effectively make it more responsive.

- A. Adding spacers (*Part #2539, sold separately*) between the upper arm and upper bulkhead will lower the roll center.
- B. Adding spacers (*Part #2539*, *sold separately*) between the lower arm and steering block will raise the roll center.
- C. Adding spacers (*Part #2539, sold separately*) between the upper arm and steering block will raise the roll center.



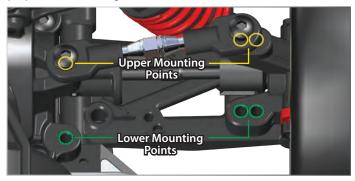
# **Track Width**

Widening the track width will add stability to the vehicle and reduce chassis roll. The track width is adjusted by lengthening or shortening both upper and lower arms by the same amounts. The steering links will need adjustment to correct the toe allignment.



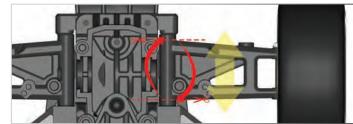
# **Dual Rear Camber Link Mounts**

There are two separate mounting points for the rear camber links. Changing the location does not affect performance but will allow the use of different bodies. The lower mounting points should be used with low-profile bodies; the upper mounting points will work with most body styles. Both mounting points feature two holes for wheel camber adjustment. Moving the links from the standard holes to the outer holes will increase camber and slightly reduce roll stiffness. This modification requires lengthening the links to ensure proper camber settings.



# Adjustable Wheelbase

The 4-Tec 2.0 chassis allows you to lengthen or shorten the wheelbase by up to 3mm for the perfect body fit. Remove the rear suspension arms from the vehicle and trim material from the front or rear of the arms. Save the material you remove and add it to the opposite side of the arms to act as a spacer, or use washers to shim the arms. **Note:** The front suspension arms are not adjustable and should not be trimmed or modified in any way.



# **Suspension Droop Adjustment**

Suspension droop is the amount of downward travel on the wheels (how much the suspension arm hangs down when the chassis is off the ground). Molded screw bosses in the suspension arms allow you to adjust droop by using a 4mm set screw (part #4897, sold separately). Tightening the screw will decrease droop and allow you to tune the suspension for better stability when cornering.





# MAINTAINING YOUR MODEL

Always wear eye protection when using compressed air or spray cleaners and lubricants.

Your model requires timely maintenance in order to stay in top running condition. The following procedures should be taken very seriously.

Frequently inspect the vehicle for obvious damage or wear. Look for:

- 1. Cracked, bent, or damaged parts
- 2. Check the wheels and steering for binding.
- 3. Check the operation of the shock absorbers.
- 4. Check the wiring for any frayed wires or loose connections.
- 5. Check the mounting of the receiver, servo, and speed control.
- 6. Check the tightness of the wheel nuts with a wrench.
- 7. Check the operation of the radio system, especially the condition of the batteries.
- 8. Check for any loose screws in the chassis structure or suspension.
- 9. Check the operation of the steering servo and ensure that it is not binding.
- 10.Inspect the gears for wear, broken teeth, or debris lodged between the teeth.

# Other periodic maintenance:

- Chassis: Keep the chassis clean of accumulated dirt and grime. Periodically inspect the chassis for damage.
- Suspension: Periodically inspect the model for signs of damage, such as bent or dirty suspension pins, bent camber links, loose screws, and any signs of stress or bending. Replace components as needed.
- Steering: Over time, you may notice increased looseness in the steering system. Replace any components as needed to restore factory tolerances.
- Shocks: Keep the oil level in the shocks full. Use only 100% pure silicone shock oil to prolong the life of the seals. If you are experiencing leakage around the top of the shock, inspect the bladder in the top cap for signs of damage or distortion from overtightening. If the bottom of the shock is leaking, then it is time for a rebuild. The Traxxas rebuild kit for two shocks is part #2362.

• **Driveline**: Inspect the driveline for signs of wear or any unusual noise or binding. Remove the gear cover and inspect the spur gear for wear and check the tightness of the set screw in the pinion gear. Tighten, clean, or replace components as needed.

Note: When replacing the spur gear, be sure the spur gear is fully seated on the center driveshaft as shown. There will be an audible "click" as the gear is pushed into place.



# Storage

When you are through running your model for the day, blow it off with compressed air or use a soft bristled paint brush to dust-off the vehicle. Always disconnect and remove the battery from your model whenever the model is stored. If your model will be stored for a long time, then also remove the batteries from the transmitter.



# TQi ADVANCED TUNING GUIDE

# **Available Tuning Adjustments**

The following items can be adjusted most easily using your mobile device and the Traxxas Link application. All the features described below may also be accessed using the MENU and SET buttons on the transmitter and observing signals from the LED. An explanation of the menu structure follows on page 34.

Your Traxxas transmitter has a programmable Multi-Function knob that can be set to control various advanced transmitter functions (set to Steering Angle by default, see page 15). Experiment with the settings and features to see if they can improve your driving experience.

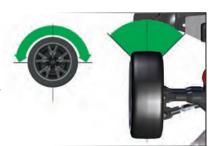
# Steering Sensitivity (Exponential)

The Multi-Function knob on the TQi transmitter can be set to control Steering Sensitivity (also known as exponential). The standard setting for Steering Sensitivity is "normal (zero exponential)," with the dial full left in its range of travel. This setting provides linear servo response: the steering servo's movement will correspond exactly with the input from the transmitter's steering

wheel. Turning the knob clockwise from center will result in "negative exponential" and decrease steering sensitivity by making the servo less responsive near neutral, with increasing sensitivity as the servo nears the limits of its travel range. The farther you turn the knob, the more pronounced the change in steering servo movement will be. The term "exponential" comes from this effect; the servo's travel changes exponentially relative to the input from the steering wheel. The exponential effect is indicated as a percentage—the greater the percentage, the greater the effect. The illustrations below show how this works.

# Normal Steering Sensitivity (0% exponential):

In this illustration, the steering servo's travel (and with it, the steering motion of the model's front wheels) corresponds precisely with the steering wheel. The ranges are exaggerated for illustrative purposes.



# TRANSMITTER LED CODES

LED Color	/ Pattern	Name	Notes
•	Solid green	Normal Driving Mode	See page 15 for information on how to use your transmitter controls.
<b>*</b>	Slow red (0.5 sec on / 0.5 sec off)	Binding	See page 16 for more information on binding.
* *	Flashing fast green (0.1 sec on / 0.15 sec off)	Throttle Trim Seek Mode	Turn the Multi-Function knob right or left until the LED stops flashing. See sidebar for more information.
*	Flashing medium red (0.25 sec on / 0.25 sec off)	Low Battery Alarm	Put new batteries in the transmitter. See page 13 for more information.
* *	Flashing fast red (0.125 sec on / 0.125 sec off)	Link Failure / Error	Transmitter and receiver are no longer bound. Turn the system off and then back on to resume normal operation. Find source of the link failure (i.e., out of range, low batteries, damaged antenna).
Programm	ning Patterns		
<b>★</b> or	Counts out number (green or red) then pauses	Current menu position	See Menu Tree for more information.
<b>₩</b> x8	Fast green 8 times	Menu setting accepted (on SET)	
<b>₩</b> x8	Fast red 8 times	Menu SET invalid	User error such as trying to delete a locked model.
DECEIV	ED LED CODES		

#### RECEIVER LED CODES

LED Color	r / Pattern	Name	Notes
•	Solid green	Normal Driving Mode	See page 15 for information on how to use your transmitter controls.
* 0	Slow red (0.5 sec on / 0.5 sec off)	Binding	See page 16 for more information on binding.
* *	Flashing fast red (0.125 sec on / 0.125 sec off)	Fail-Safe / Low-Voltage Detect	Consistent low voltage in the receiver triggers Fail-Safe so there is enough power to center the throttle servo before it completely loses power.



# Throttle Trim Seek Mode

When the Multi-Function knob is set to throttle trim, the transmitter remembers the throttle trim setting. If the throttle trim knob (Multi-Function knob) is moved from the original setting while the transmitter is off, or while the transmitter was used to control another model, the transmitter ignores the actual position of the trim knob. This prevents the model from accidentally running away. The LED on the face of the transmitter will rapidly blink green and the throttle trim knob (Multi-Function knob) will not adjust the trim until it is moved back to its original position saved in memory. To restore throttle trim control, simply turn the Multi-Function knob either direction until the LED stops blinking.



# Fail-sai

Your Traxxas radio system is equipped with a built-in fail-safe function that returns the throttle to its last saved neutral position in the event of a signal loss. The LED on the transmitter and the receiver will rapidly flash red.



# **Starting Over:**

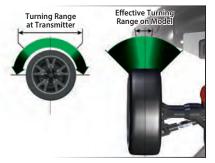
# **Restoring Factory Defaults**

When programming your TQi transmitter, you may feel the need to start over with a clean slate. Follow these simple steps to restore the factory settings:

- 1. Turn the transmitter off.
- 2. Hold both MENU and SET.
- 3. Turn the transmitter on.
- 4. Release MENU and SET. The transmitter LED will blink red.
- Press SET to clear settings. The LED will turn solid green and the transmitter is restored to default.

# Decreased Steering Sensitivity (Negative Exponential):

By turning the Multi-Function knob clockwise, the steering sensitivity of the model will be decreased. Note that a relatively large amount of steering wheel travel results in a smaller amount of servo travel. The farther you turn the knob, the more pronounced the effect becomes. Decreased steering sensitivity may be



helpful when driving on low-traction surfaces, when driving at high speed, or on tracks that favor sweeping turns where gentle steering inputs are required. The ranges are exaggerated for illustrative purposes.

# Throttle Sensitivity (Throttle Exponential)

The Multi-Function knob can be set to control Throttle Sensitivity. Throttle Sensitivity works the same way as Steering Sensitivity, but applies the effect to the throttle channel. Only forward throttle is affected; brake/reverse travel remains linear regardless of the Throttle Sensitivity setting.

# Steering Percentage (Dual Rate)

The Multi-Function knob can be set to control the amount (percentage) of servo travel applied to steering. Turning the Multi-Function knob fully clockwise will deliver maximum steering throw; turning the knob counterclockwise reduces steering throw (note: turning the dial counterclockwise to its stop will eliminate all servo travel). Be aware that the steering End Point settings define the servo's maximum steering throw. If you set Steering Percentage to 100% (by turning the Multi-Function knob fully clockwise), the servo will travel all the way to its selected end point, but not past it. Many racers set Dual Rate so they have only as much steering throw as they need for the track's tightest turn, thus making the car easier to drive throughout the rest of the course. Reducing steering throw can also be useful in making a car easier to control on high-traction surfaces, and limiting steering output for oval racing where large amounts of steering travel are not required.

# **Steering and Throttle End Points**

The TQi transmitter allows you to choose the limit of the servo's travel range (or its "end point") independently for left and right travel (on the steering channel) and throttle/brake travel (on the throttle channel). This allows you to fine-tune the servo settings to prevent binding caused by the servo moving steering or throttle linkages (in the case of a nitro car) farther than their mechanical limits. The end point adjustment settings you select will represent what you wish to be the servo's maximum travel; the Steering Percentage or Braking Percentage functions will not override the End Point settings.

# Steering and Throttle Sub-Trim

The Sub-Trim function is used to precisely set the neutral point of the steering or throttle servo in the event that simply setting the trim knob to "zero" does not completely center the servo. When selected, Sub-Trim allows finer adjustment to the servo output shaft's position for precise setting of the neutral point. Always set the Steering Trim knob to zero before making final adjustment (if required) using Sub-Trim. If Throttle Trim has been previously adjusted, the Throttle Trim will need to be reprogrammed to "zero" before making final adjustment using Sub-Trim.

# **Braking Percentage**

The Multi-Function knob may also be set to control the amount of brake travel applied by the servo in a nitro-powered model. Electric models do not have a servo-operated brake, but the Braking Percentage function still operates the same way in electric models. Turning the Multi-Function knob full clockwise will deliver maximum brake throw; turning the knob counterclockwise reduces brake throw (Note: Turning the dial counterclockwise to its stop will eliminate all brake action).

# Throttle Trim

Setting the Multi-Function knob to serve as throttle trim will allow you to adjust the throttle's neutral position to prevent unwanted brake drag or throttle application when the transmitter trigger is at neutral. **Note**: Your transmitter is equipped with a Throttle Trim Seek mode to prevent accidental runaways. See the sidebar on page 31 for more information.

# **Setting Lock**

Once you've adjusted all of these settings the way you like them, you may want to disable the Multi-Function knob so none of your settings can be changed. This is especially handy if you operate multiple vehicles with a single transmitter via Traxxas Link Model Memory.

# Multiple Settings and the Multi-Function Knob

It is important to note that settings made with the Multi-Function knob are "overlaid" on top of each other. For example, if you assign the Multi-Function knob to adjust Steering Percentage and set it for 50%, then reassign the knob to control Steering Sensitivity, the transmitter will "remember" the Steering Percentage setting. Adjustments you make to Steering Sensitivity will be applied to the 50% steering throw setting you selected previously. Likewise, setting the Multi-Function knob to "disabled" will prevent the knob from making further adjustments, but the last setting of the Multi-Function knob will still apply.

# TRAXXAS LINK MODEL MEMORY

Traxxas Link Model Memory is an exclusive, patent-pending feature of the TQi transmitter. Each time the transmitter is bound to a new receiver, it saves that receiver in its memory along with all the settings assigned to that receiver. When the transmitter and any bound receiver are switched on, the transmitter automatically recalls the settings for that receiver. There is no need to manually select your vehicle from a list of model memory entries.

# Model Lock

The Traxxas Link Model Memory feature can store up to thirty models (receivers) in its memory. If you bind a thirty-first receiver, Traxxas Link Model Memory will delete the "oldest" receiver from its memory (in other words, the model you used the longest time ago will be deleted). Activating Model Lock will lock the receiver in memory so it cannot be deleted.

You may also bind multiple TQi transmitters to the same model, making it possible to pick up any transmitter and any previously bound model in your collection and simply turn them on and drive. With Traxxas Link Model Memory, there is no need remember which transmitter goes with which model and there is never a need to have to select any model from a list of model memory entries. The transmitter and receiver do it all for you automatically.

# To activate Model Lock:

- 1. Switch on the transmitter and receiver you wish to lock.
- 2. Press and hold MENU. Release when the status LED blinks green.
- Press MENU three times. The status LED will blink green four times repeatedly.
- 4. Press SET. The status LED will blink green in single-flash intervals.
- Press SET once. The status LED will blink red once repeatedly.
- 6. Press MENU once. The LED will blink red twice repeatedly.
- 7. Press SET. The LED will blink rapidly green.
  The memory is now locked. Press MENU and SET to return to driving mode.

**Note**: To unlock a memory, press SET twice at step 5. The LED will blink rapidly green to indicate the model is unlocked. To unlock all models, press MENU twice at step 6 and then press SET.

# To delete a model:

At some point, you may wish to delete a model you no-longer drive from the memory.

- 1. Switch on the transmitter and receiver you wish to delete.
- 2. Press and hold MENU. Release when the status LED blinks green.
- Press MENU three times. The status LED will blink green four times repeatedly.
- 4. Press SET once. The status LED will blink green once repeatedly.
- Press MENU once. The status LED will blink green twice repeatedly.
- Press SET. The memory is now selected to be deleted.
   Press SET to delete the model. Press and hold MENU to return to driving mode.

## **MENU TREE**

The Menu Tree below shows how to navigate through the TQi transmitter's various settings and functions. Press and hold MENU to enter the Menu Tree, and use the following commands to navigate through the menu and select options.

- MENU: When you enter a menu, you always start at the top. Press MENU to move down the Menu Tree. MENU again will return you to the top.
- options. When an option is committed to the transmitter's memory, the status LED will rapidly blink green.
- the Menu Tree.
- **EXIT:** Press and hold MENU to exit programming.
- Echo will "play back" your current position on the If your current position is Steering Channel End twice, green once, and then red three times. Echo will not alter your adjustments or change your position in the programming sequence.

Tree. In the example, the user is setting the Multi-Function knob to be a Steering % (Dual-Rate) control.

- Sensitivity (Expo) has been selected.
- indicate Steering % (Dual-Rate) has been selected.
- successful selection.

Throttle Sensitivity (Expo) **Enter Programming** Two Blinks Red Press and hold MENU for 3 seconds Steering % (Dual-Rate) Three Blinks Red Press SET to select an option. When you reach the bottom of the tree, pressing **Servo Reversing** Press SET to reverse **Braking** % One Blink Red Four Blinks Red Press SET to move across the Menu Tree and select **Multi-Function Knob** Press Sub-Trim Throttle Trim One Blink Green Two Blinks Red Five Blinks Red **End Points Knob Disabled** Three Blinks Red BACK: Press both MENU and SET to go back one level in Six Blinks Red Press Torque Control\* MENU Seven Blinks Red Your selected options will be saved. TSM **ECHO:** Press and hold SET to activate the "echo" function. Four Blinks Red Eight Blinks Red Menu Tree should you lose your place. For example: Steering (Channel 1) Press **Channel Setup Press** SET Servo Reversing Press SET to reverse Two Blinks Green SET One Blink Green Points, holding SET will cause the LED to blink green One Blink Red Press MENU Sub-Trim ⊢ Press Press 2 W Throttle (Channel 2) Two Blinks Red MENU Two Blinks Green Below is an example of how to access a function in the Menu **End Points** Three Blinks Red Press SET to select an option. Electric Mode Selection **Press** To set the Multi-Function knob to control STEERING % (DUAL-RATE): Three Blinks Green SET One Blink Red 1. Switch the transmitter on. Press MENU 2. Press and hold MENU until the green LED lights. It will blink in single Press Four Blinks Red Nitro MENU 3. Press SET. The red LED will blink in single intervals to indicate Steering Two Blinks Red 4. Press MENU twice. The red LED will blink three times repeatedly to TSM Traxxas-Link **Press** One Blink Red Four Blinks Green SET 5. Press SET to select. The green LED will blink 8 times fast to indicate TSM Drift 6. Press and hold MENU to return to driving mode. Two Blinks Red **Restoring Factory Defaults:** Gyro Three Blinks Red Press SET to clear settings. LED will turn Transmitte Hold both Transmitter Release MENU and SET **MENU and SET** red LED blinks solid green. Transmitter is restored to defaul

Note: The transmitter is "live" during programming so you can test the settings real time without having to exit the Menu Tree.

Press MENU to move through options.

Press MENU to move through options.

Steering Sensitivity (Expo)

Press SET to select an option.

One Blink Red

servo direction.

Use knob to adjust sub-trim. Press SET to save.

Use steering wheel to adjust. Turn right to desired end point, press set to save.

Turn left to desired end point and press set to save. To reset max throw: Let go of controls and press SET.

> Reset End Points Press SET to restore factory default end points.

> > servo direction.

Use knob to adjust subtrim. Press SET to save.

Use trigger to adjust, Pull back to desired end point, press set to save. Push

forward to desired end point and press set to save. To reset max throw: Let go of controls and press SET.

> Reset End Points Press SET to restore factory default end points.



red LED blinks

red LED blinks (x4)

green LED blinks (x8)

returns to driving mode

green LED blinks

green LED blinks (x2)

green LED blinks

green LED blinks (x2)

# MUSTANG



6250 TRAXXAS WAY, McKINNEY, TEXAS 75070 1-888-TRAXXAS