

TQ 2.4GHz Radio System Instructions

The Traxxas TQ 2.4 radio system uses the latest Direct Sequence Spread Spectrum technology to provide superior signal quality, reliability and instant response even in "noisy" conditions that can cause glitching and "hits" with standard AM and FM systems. There is no need to monitor other frequencies or channels for conflicts; the TQ 2.4 automatically locates and locks onto an open frequency when you power up. Additional channels allow functions such as lights, reversing/shifting transmissions, and other features to be operated, in addition to the steering and throttle functions. The included micro receiver fits easily in any application, and dual channel-1 inputs eliminate the need for a Y-harness when using dual steering servos.

System Features

- Comfortable, ergonomic case design
- 2-position Channel 3 switch
- 3-position Channel 4 switch
- Simple analog trim controls, no programming required
- Servo-reversing on all four channels
- Micro receiver installs easily in any application
- Dual steering-servo inputs
- Compatible with all popular servo and speed control brands

TQ-4 Radio System Adjustments

In addition to the electronic throttle and steering trim controls, your radio system features throttle neutral adjustment and servo reversing switches.

• Throttle Trim

The electronic throttle trim located on the face of the transmitter adjusts the neutral (center) point of the throttle channel.

• Steering Trim

The electronic steering trim located on the face of the transmitter adjusts the neutral (center) point of the steering servo when the transmitter's steering wheel is at rest. Adjust this control to make the model drive straight with no steering input at the wheel.

• Channel 3 Trim

This adjustment is located on the back of the transmitter and is accessible using a 1/8" (3mm) flat-blade screwdriver. Turning the adjustment potentiometer (or "pot") will set the neutral point of the servo plugged into the receiver's third channel.

• Channel 4 Trim

This adjustment is located on the back of the transmitter and is accessible using a 1/8" (3mm) flat-blade screwdriver. Turning the adjustment potentiometer (or "pot") will set the neutral point of the servo plugged into the receiver's third channel.

• Channel 3 Switch

The red rocker switch controls the transmitter's third channel. A servo plugged into Channel 3 will move to full travel in one direction when the switch is in the "up" position, then move to the opposite end of its travel range when the switch is in the "down" position. The channel 3 servo-reversing switch allows you to select the servo's direction of travel relative to switch position.

• Channel 4 Switch

The toggle switch located just in front of the steering wheel operates the fourth channel. The three-position switch allows you to hold the servo at its center position, or select full-left or full-right travel by flipping the switch up or down. The Channel 4 servo-reversing switch allows you to select the servo's direction of travel relative to switch position.

• Transmitter binding SET button

This button is used to electronically "bind" the transmitter to the receiver. See *TQ 2.4 Transmitter Binding Instructions* for details.

Covers TQ 2.4GHz high-output model #2228, 2229, **TOP QUALIFIER** 2230 and TQ 2.4GHz model #2232, 2233, 2234

• Servo Reversing Switches

The servo reversing switches are located on the front of the transmitter, next to the on/off switch. Moving a switch reverses the direction of the corresponding servo. Each switch corresponds to a channel on the receiver (see *TQ 2.4 receiver image, opposite side*). For example, if you turn the steering wheel to the right and your wheels turn left, you would move the Channel 1 switch to correct the servo direction. It may be necessary to adjust the corresponding trim control after moving a switch.

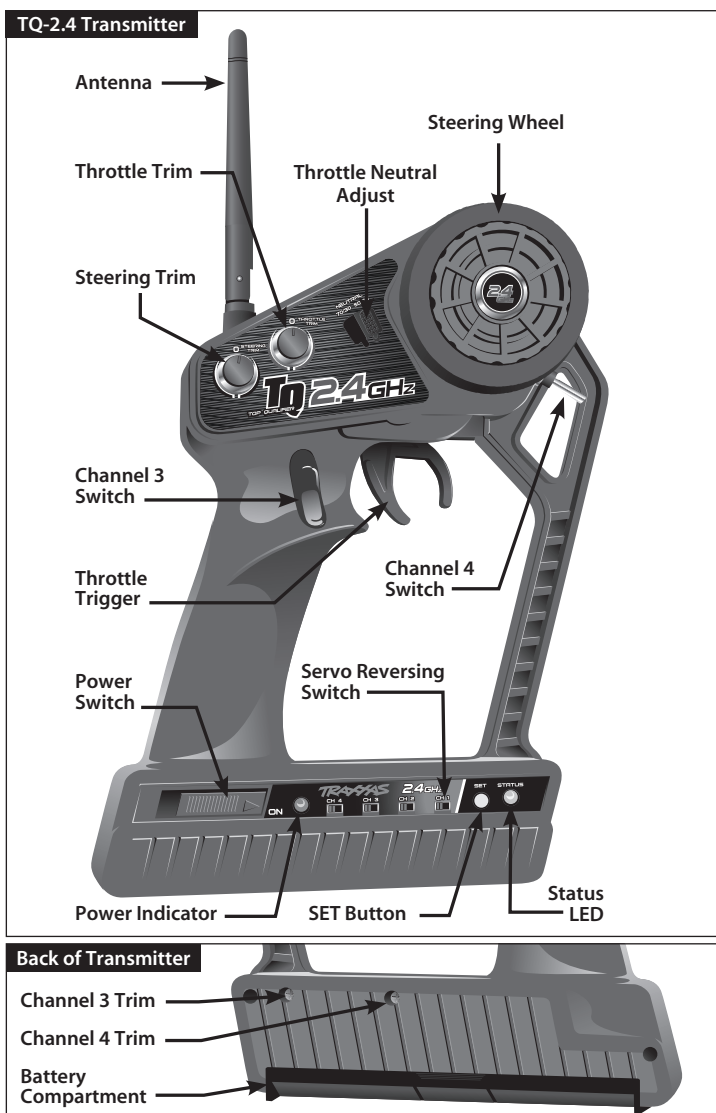
• Throttle Neutral Adjustment

The throttle neutral adjustment is located on the transmitter face and controls the forward/reverse travel of the throttle trigger. Change the adjustment by pressing the button and sliding it to the desired position. There are two settings available:

50/50: Allows equal travel for both acceleration and reverse.

70/30: Allows more throttle travel (70%) and less reverse travel (30%).

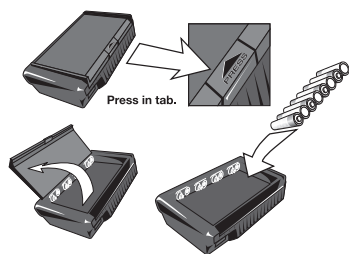
Note: If you change the position of the Throttle Neutral selector, you will need to reset the receiver's throttle endpoints. See *Setting the TQ 2.4 Transmitter Throttle Endpoints* for the required steps. It is also likely that you will need to reprogram your car's electronic speed control or readjust the throttle and brake linkages to operate properly with the new throttle-neutral setting.



Installing Transmitter Batteries

Your TQ-4 transmitter uses 8 AA batteries. The battery compartment is located in the base of the transmitter.

1. Remove the battery compartment door by pressing the tab and lifting the door up.
2. Install the batteries in the correct orientation as indicated in the battery compartment.
3. Reinstall the battery door and snap it closed.
4. Turn on the transmitter and check the power indicator for a solid red light.

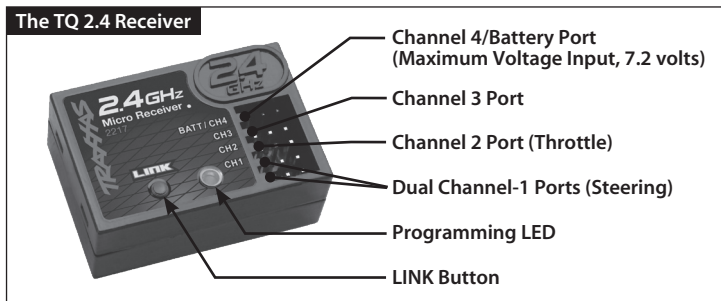


If the power indicator light flashes, then the transmitter batteries are weak, discharged or possibly installed incorrectly. Replace with new or freshly charged batteries. The power indicator light does not indicate the charge level of the battery pack installed in the model.

TQ 2.4 Transmitter Binding Instructions

For proper operation, the transmitter and receiver must be electronically

The TQ 2.4 Receiver



'bound.' **This has been done for you at the factory.** Should you ever need to re-bind the system, follow these instructions. **Note:** the receiver must be connected to a 4.8-7.2v power source for binding.

1. Press and hold the transmitter's SET button as you switch transmitter on. The SET LED will flash.
2. Press and hold the receiver's LINK button as you switch receiver on. The LINK LED will flash.
3. When both LEDs stop flashing (this will take just a moment or two), the system is bound and ready for use. Confirm that the steering and throttle operate properly before driving your model.

Setting the TQ 2.4 Transmitter Throttle Endpoints

The Traxxas TQ 2.4GHz radio system is pre-set at the factory and is ready for use. If you wish to reprogram the receiver to make certain the throttle endpoints are correctly set, follow the steps below.

1. Switch the transmitter and receiver on.
2. Press and hold the receiver's LINK button until the LED blinks red once then switches off. Release the LINK button.
3. Pull the throttle trigger to the full-throttle position and hold until the receiver's LED blinks red twice.
4. Push the trigger to full brake and hold until the red LED blinks twice.
5. Return the trigger to neutral. The LED will blink three times then remain on (the LED will shine green if fail-safe is active, or red if fail-safe is disabled).

TQ 2.4 Transmitter Fail-Safe Operation

When bound to the transmitter, the 2.4GHz Micro Receiver automatically sets its fail-safe position to throttle neutral. This means the receiver will automatically return the throttle setting to neutral in the event of signal loss due to interference, low battery power, or accidentally switching the transmitter off while driving. When powered on, the receiver's green LED will glow to indicate fail-safe mode is active. If the LED glows red, the fail-safe mode has been deactivated. Use these steps to reactivate the fail-safe system:

1. Switch the transmitter and receiver on.
2. Press and hold the receiver's LINK button. The LED will flash once, then turn off. Continue to hold the LINK button. After about three seconds, the LED will flash on and off. It will continue flashing as long as you hold the LINK button.
3. Release the LINK button. The LED will now light green and glow steadily, indicating fail-safe mode is active.

Should you ever wish to deactivate the fail-safe mode (for example, when using a speed control that has its own fail-safe circuitry), simply repeat the steps above.

Traxxas 2.4GHz Parts

2206	TQ 2.4GHz radio system, 4-channel (4-channel transmitter & mini receiver) no servos	\$150.00
2207	TQ 2.4GHz radio system, 2-channel (2-channel transmitter & 4-channel mini receiver) no servos	\$125.00
2230	Transmitter, 2.4GHz, 4-channel (transmitter only)	\$115.00
2228	Transmitter, 2.4GHz, 2-channel (transmitter only)	\$90.00
2217	Receiver, micro 2.4GHz (4-channel)	\$45.00

Warranty Information

Traxxas warrants your Traxxas electronic components to be free from defects in materials or workmanship for a period of thirty (30) days from the date of purchase. Before returning any product for warranty service, please contact our service department (1-888-TRAXXAS)* to discuss the problem you are having with the product. After contacting Traxxas, send the defective unit along with your proof of purchase indicating the date purchased, your return address, e-mail, a daytime phone number, and a brief description of the problem to:

Traxxas
1100 Klein Road
Plano, TX 75074

Detailed Limitations for Electronic Components:

- Allowing water, moisture, or other foreign material to enter the component or get onto the PC board.
- Exceeding the maximum input voltage of the electronic component.
- Reverse voltage application.
- Incorrect installation or wiring.
- Components worn from use.
- Splices to the input or switch harnesses.
- Disassembling the case.
- Excessive force when adjusting, pressing, or turning any of the controls.
- Tampering with the internal electronics.
- Incorrect wiring of an FET servo.
- Allowing exposed wiring to short circuit.
- Any damage caused by crash, flooding, or act of God.

Limitations

Any and all warranty coverage does not cover replacement of parts and components damaged by abuse, neglect, improper or unreasonable use, crash damage, water or excessive moisture, chemical damage, improper or infrequent maintenance, accident, unauthorized alteration or modification, or items that are considered consumable. Traxxas will not pay for the cost of shipping or transportation of a defective component from you to us.

Limitations of Liability

Traxxas makes no other warranties expressed or implied. Traxxas shall not be liable for any special, indirect, incidental, or consequential damages arising out of the assembly, installation, or use of their products or any accessory or chemical required to use their products. By the act of operating/using the product, the user accepts all resulting liability. In no case shall Traxxas' liability exceed the actual purchase price paid for the product. Traxxas reserves the right to modify warranty provisions without notice. All warranty claims will be handled directly by Traxxas. The Traxxas warranty gives the customer specific legal rights and possibly other rights that vary from state to state. The customer is required to fill out and return the Registration Card enclosed with the product as a condition of the coverage and performance of the warranty. All dollar amounts stated are in United States dollars. The term "lifetime" shall refer to the product's production life at Traxxas. Traxxas is not obligated to provide upgraded products at a reduced rate when a previous product's production cycle has ended.

Traxxas Extended Lifetime Electronics Warranty:

After the expiration date of the free warranty period, Traxxas will repair electronic components for a flat rate. The electronic products covered by this extended service plan include electronic speed controls, transmitters, receivers, servos, and battery chargers. Motors, batteries, and mechanical speed controls are not covered. The covered repairs are limited to non-mechanical components that have NOT been subjected to abuse, misuse, or neglect. Products damaged by intentional abuse, misuse, modification, or neglect, may be subject to additional charges. Visit Traxxas.com or call 1-888-TRAXXAS (1-888-872-9927) for details on extended warranty service and rates.

FCC Compliance

This device 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.

If you have questions or need technical assistance, call Traxxas at
1-888-TRAXXAS
(1-888-872-9927) (U.S. residents only)

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