Servo Reversing Switches

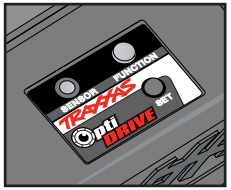
The servo reversing switches are located on the front of the transmitter, next to the on/off switch. Moving a switch reverses the direction of the corresponding servo. Each switch corresponds to a channel, as shown below. For example, if you turn the steering wheel to the right and your front wheels 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. The default position for the servo reversing switches is shown.

TQ-3 Channel to Servo Chart

Channel	Servo
1	Steering
2	Throttle and braking
3	Shifting

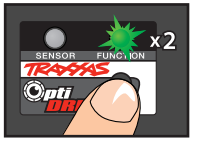
Programming the OptiDrive™ ESM

The OptiDrive ESM electronically monitors vehicle speed and controls forward and reverse shifting. Controlling the shift action electronically rather than by mechanical systems reduces the number of components in the transmission. The transmission weighs less, there is lower rotational mass for quicker acceleration, and constant drive engagement for smooth power delivery.

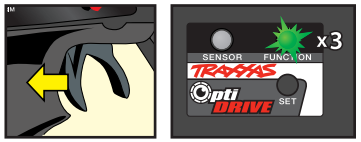


The OptiDrive module prevents the transmission from changing directions while the truck is in motion. The truck must be completely stopped to change directions, regardless of the position of the shift selector switch on the transmitter. The OptiDrive module is preset at the factory. If the transmitter throttle trim adjustment is changed, then the OptiDrive module will need to be re-programmed.

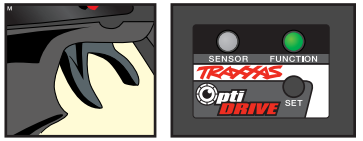
1. The engine must be shut off. The radio system must be on (receiver and transmitter).
2. Set the TQ-3 Transmitter to its factory default shift settings:
   - Set the THROTTLE NEUTRAL switch to the 50/50 setting.
   - Set the THROTTLE TRIM to the center "0" setting, then adjust the THROTTLE TRIM until the carburetor closes.
   - Set the CHANNEL 2 SERVO REVERSING SWITCH to the right position.
   - Set the CHANNEL 3 SERVO REVERSING SWITCH to the right position.
   - DO NOT change the position of any of the servo reversing switches after programming the OptiDrive. If settings were changed after programming the OptiDrive, it will have to be reprogrammed.
3. With the throttle at neutral, press and hold the SET button until the Function LED flashes green twice and then release the button immediately. You are now in programming mode.



4. Pull the transmitter throttle trigger to the full throttle position. Hold it there until the Function LED flashes green three times. **Note:** The throttle servo will not move during programming even though it is connected to the controller.



5. Release the transmitter throttle trigger allowing it to return to neutral. The Function LED will turn solid green, indicating that the shifting servo is OK to shift and the programming has been completed. The controller is now programmed and ready to go!



   - If the transmitter throttle settings are changed, it will be necessary to complete the programming sequence again.
   - If the SET button is released before the Function LED flashes green twice in step 3, the OptiDrive will return to the normal operation mode.
   - If you experience any problems during programming, turn the receiver off, then on again, and repeat the programming steps.

For instructions on how to use the OptiDrive with aftermarket radio systems, or to access advanced programming options, visit our website, www.Traxxas.com.

Large adjustments to the throttle trim and/or throttle linkage may require re-setting the OptiDrive ESM to maintain proper shifting action.

For transmission durability, the OptiDrive ESM limits the model's reverse speed to about 70% of full throttle. If settings are changed, and you notice a decrease in forward top speed, you could have the OptiDrive system reversed. Return the TQ-3 servo-reversing switches for channels two and three back to their default settings and re-program the OptiDrive Module. For programming with aftermarket radio systems, please see our website.

OptiDrive Operation

- **Green "Function"** Shift allowed

- **Red flashing "Function"** Low battery, see pg. 12

- **Red "Sensor"** Sensor circuit is broken. Possible disconnected sensor, broken wires, or damaged sensor.

- **Blue flashing "Sensor"** Normal operation as vehicle moves. Indicates signal pulse from sensor. Depending on the rotor position, solid blue or off when vehicle is at rest.