

Owners Manual Addendum: XL-5 ESC with Low-Voltage Detection

Covers Part #3018R

Your model's XL-5 Electronic Speed Control now features 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.

Your model includes a Power Cell NiMH battery. The XL-5 speed control's Low Voltage Detection has been disabled for best performance with this battery. The speed control's LED will glow red when it is turned on, indicating Low Voltage Detection is disabled. Be certain to activate Low-Voltage Detection if you install LiPo batteries in your model. **Never use LiPo batteries while Low-Voltage Detection is disabled.**

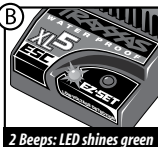
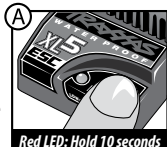
Verify that Low-Voltage Detection is DISABLED:

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 EZ-Set button to turn the XL-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.



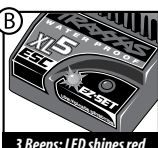
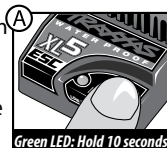
To activate Low-Voltage Detection (LiPo setting):

1. Make sure the LED on the XL-5 is on and shines red.
2. Press and hold the EZ-SET® button (the LED will turn off) (A). After ten seconds, the motor will beep twice and the LED will shine green. Release the button (B).
3. Low-Voltage Detection is now ACTIVATED.



To disable Low-Voltage Detection (NiMH setting):

1. Make sure the LED on the XL-5 is on and shines green.
2. Press and hold the EZ-SET® button (the LED will turn off) (A). After ten seconds, the motor will beep three times and the LED will shine red. Release the button (B).
3. Low-Voltage Detection is now DISABLED.



Throttle Neutral Protection

Your model's XL-5 speed control also features Throttle Neutral Protection. If the transmitter's throttle trim setting is changed while the speed control is switched off, Throttle Neutral Protection prevents the speed control from activating the motor until the throttle trim is corrected. Throttle Neutral Protection also 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.

LED Codes and Protection Modes

- **Solid Green:** XL-5 power-on light. Low-Voltage Detection is ACTIVATED (LiPo setting).
- **Solid Red:** XL-5 power-on light. Low-Voltage Detection is DISABLED (NiCad/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 (see pages 20-21 in the manual).
- **Slow Blinking Red (with Low-Voltage Detection on):** 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 Throttle Neutral Protection is activated, or 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. If this does not restore normal operation, then the XL-5 is indicating the transmitter's Throttle Trim (see page 28) is incorrectly set. Reset the throttle trim to the "0" position.

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