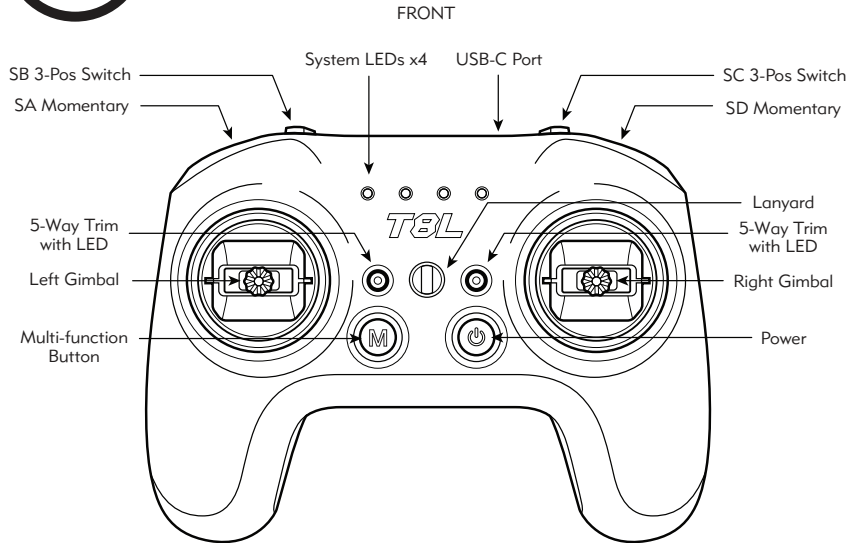


T8L

2.4
GHZ

Quick Start Guide

Voltage Range
6.0-8.4V DC



BATTERIES NOT INCLUDED

SPECIFICATIONS

- | | | | |
|-----------------------|-------------------|-------------------|-------------------------------|
| • Item: | T8L Radio | • Battery: | 3.7v 18650 * 2 (Not included) |
| • Size: | 165*120*70mm | • Channels: | 10 channels (RX dependent) |
| • Weight: | 204grams | • Charging: | Built in USB-C Charging |
| • Frequency: | 2.400GHz-2.480GHz | • Upgrade method: | Via USB |
| • RF Module: | ExpressLRS | • Gimbals: | High-precision Hall sensor |
| • Transmission power: | Max 20dbm (100mW) | | |

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INTRODUCTION

Focusing on simplicity, accuracy, and portability, the T8L offers the core features of a full-size radio while preserving the trusted speed and dependability of ExpressLRS 2.4GHz. Whether you're starting out or looking for a clean, travel-friendly setup, the T8L is designed to get you quickly.

A clean layout, high-precision Hall gimbals, easy trim control, and support for Web-UI configuration make the T8L a powerful yet simple system. The built-in USB-C charging and simulator compatibility provide added convenience for handlers who value efficiency without sacrificing capability. The T8L is designed for use in boat models, car models, and other similar applications.

SAFETY INFORMATION

Never operate the T8L radio system in the following conditions:

- In severe weather or strong windy conditions, such as rain, hail, snow, storms or electromagnetic environments.
- In limited visibility.
- In the proximity of other people, property, high-voltage power lines, public roads, vehicles or animals

- When feeling unwell, or under the influence of drugs or alcohol.

- If the T8L radio system/model is damaged or showing signs of interference.

- In areas with high 2.4GHz interference or where 2.4GHz radios are prohibited.

- When the TX/RX battery is low.

BATTERIES & CHARGING

T8L is powered by (2x) 3.7V 18650 Lithium-Ion cells and is charged using the built-in USB-C port. The charging circuitry is designed for charging (2x) 3.7V Lithium-Ion batteries only. The nominal voltage is 3.7V and the maximum charging voltage is 4.2V.

DO NOT charge 3.6V LiFe and 3.6V 18650 Lithium Ion packs with the onboard charger. Charging or using the wrong battery chemistry/polarity may cause permanent damage to the PCB and in certain situations cause fires.

Please check the voltage and condition of the battery regularly and never charge unattended. Always charge in a safe area away from combustible materials. Refrain from charging if the remote control gets wet or damaged in any way. **DO NOT** charge with the polarity reversed.

POWERING ON & OFF

Power-On

- Long-press the Power Button
- The System LEDs will light up in a progress bar style
- Release after a single beep
- Two quick beeps confirm system initialization is complete

⚠ Tip: Always ensure the throttle stick is in the lowest position when powering on.

VCP Mode (Configuration)

- Press and hold the Multi Function(M) button and then long-press the Power button
- Used to access USB Web Config mode (VCP)
- Connect to PC/Mac via USB for configuration through the T8L HTML interface

⚠ Note: Simulator mode is not available in VCP mode.

Power-Off

- Long-press the Power Button
- The System LEDs will show a reverse progress bar
- Release when the beep sounds

CONNECTING TO THE WEB UI

The T8L Web UI enables configuration of settings through a computer interface, similar to the ExpressLRS Configurator.

Enter VCP Mode:

- Long-press the Power and M (Multi-Function) buttons together to enter VCP Debug Mode.

Connect to Your Computer:

- Use a USB Type-C cable to connect the T8L to your PC or Mac.

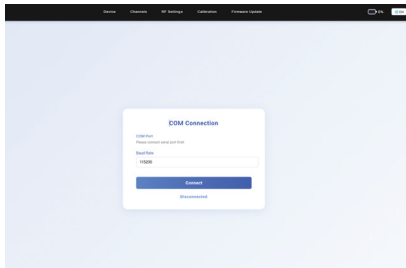
Open the Web UI:

- Launch a Chromium-based browser (e.g., Google Chrome or Microsoft Edge).
- Navigate to the T8L Web UI

Establish Serial Connection:

- Select T8L from the port dropdown list.
- Set baud rate (range: 9600–921600 bps, default: 115200 bps).
- Click Connect.

⚠ Note: Ensure a stable USB connection and correct port selection to avoid connection issues.



BINDING WITHOUT WEB-UI

- Power on the T8L (two beeps indicate ELRS module readiness).
- Power the receiver on/off three times to enter binding mode (the LED will flash).
- Press and hold the multi-function (M) Button for ~1 second.
- A beep confirms the command.
- The 4 system LEDs flash twice slowly to confirm the binding signal has been sent.

⚠ Troubleshooting Binding

If the receiver displays rapid or double flashes without binding, it may require a firmware update. Visit the official ExpressLRS website to update the receiver.

⚠ Note: This is a one-way bind signal. The Rx will transition from a flashing LED to a solid ON state to confirm binding.

TRIM FUNCTION

- Trim adjustments are only available after power-on
- Trim allows for fine-tuning of the gimbal centering

When active:

- Trim LED lights up
- The buzzer gives a rising tone

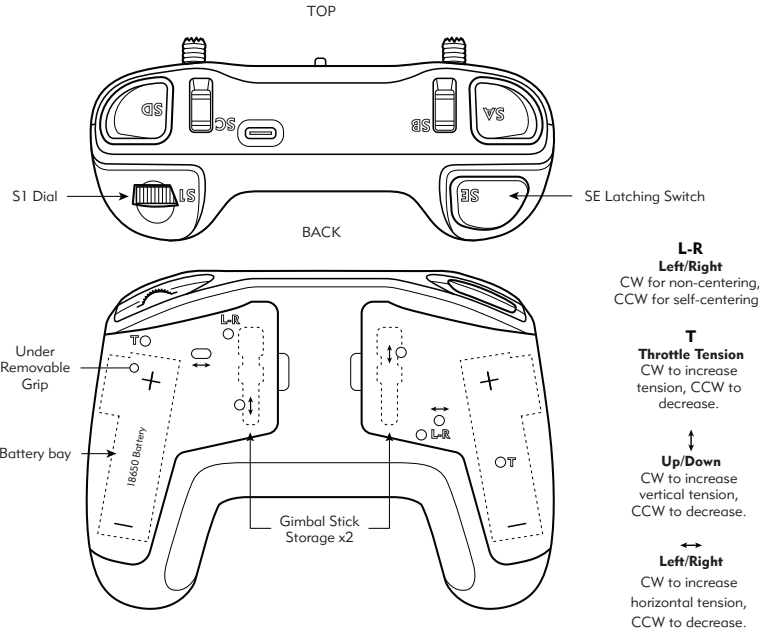
Resetting Trim on the T8L

- Press and hold the Trim button until a beep sounds
- Release to complete trim reset
- Trim LED will turn off

LED INDICATORS

- **System LEDs (x4):** Show power, battery level (25% per LED), calibration, and binding status.

- **Trim LED:** Located behind the translucent trim button, it indicates trim activity or calibration.



CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the 2.400GHz to 2.4835GHz frequency range.

EU SIMPLE DECLARATION OF CONFORMITY

Declares the radio equipment T8L is in compliance with EU directives Directive 2014/53/EU.



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FCC Warning

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Specific Absorption Rate (SAR) information:

This product meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Model: T8L (FCC ID: 2BUHG-T8L) has also been tested against this SAR limit. This device was tested for typical body-worn operations 0mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 0mm separation distance between the user's body.

Body-worn Operation

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0mm must be maintained between the user's body, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.