

ThruNite TC12

ThruNite TC12 USB Rechargeable LED Flashlight User Manual

1. INTRODUCTION

Thank you for purchasing the ThruNite TC12 USB Rechargeable LED Flashlight. This manual provides detailed instructions for the safe and efficient use of your new flashlight. The TC12 is a versatile and powerful illumination tool, featuring a CREE XP-L V6 LED, a maximum output of 1000 lumens, and a built-in Micro USB charging port for convenience. It is designed for various applications, from daily use to demanding outdoor activities.

The TC12 incorporates advanced protection circuits against overcharge, overdischarge, and overcurrent, ensuring reliable performance and battery longevity. It also features ThruNite's Intelligent Temperature Control (ITC) Technology to prevent overheating.

2. PACKAGE CONTENTS

- ThruNite TC12 Flashlight (1 unit)
- ThruNite 18650 3400mAh Rechargeable Battery (1 unit)
- Holster (1 unit)
- Spare O-rings (2 units)
- Lanyard (1 unit)
- Pocket Clip (1 unit)
- USB Charging Cable (1 unit)



Figure 2.1: The ThruNite TC12 flashlight shown with all included accessories: holster, spare O-rings, lanyard, pocket clip, 18650 battery, and USB charging cable.

3. SPECIFICATIONS

Feature	Detail
LED	CREE XP-L V6
Battery	1 x 18650 (ThruNite 18650 3400mAh included)
Operating Voltage	2.75V - 5.0V
Charging Current	5V, 1A
Operating Temperature	-40°C to 80°C
Max Beam Distance	274 meters
Peak Beam Intensity	18760 cd
Impact Resistance	1.5 meters

Feature	Detail
Waterproof Rating	IPX-8 (2 meters submersible)
Weight	85g (without battery)
Dimensions	140mm (Length) x 25.4mm (Diameter)

Output and Runtime

Mode	Output (Lumens)	Runtime
Turbo	1000	2.6 hours
High	640	2.5 hours
Medium	180	9.5 hours
Low	28	3 days
Firefly	0.4	70 days
Strobe	800	4.8 hours

4. SETUP

4.1 Battery Installation

1. Unscrew the tail cap of the flashlight.
2. Insert the included ThruNite 18650 battery with the positive (+) end facing towards the head of the flashlight.
3. Screw the tail cap back on tightly.



Figure 4.1: The ThruNite TC12 flashlight, showing its overall structure including the tail cap for battery access.

4.2 Charging

The TC12 features a built-in Micro USB charging port, allowing for convenient charging without removing the battery.

1. Locate the Micro USB port on the side of the flashlight head. It is protected by a rubber cover.
2. Gently lift the rubber cover to expose the USB port.
3. Connect the included USB charging cable to the flashlight's Micro USB port and the other end to a USB power source (e.g., computer, wall adapter, power bank).
4. During charging, an indicator light will illuminate. The light will change color to indicate charging status (e.g., red for charging, blue for fully charged).
5. Once charging is complete, disconnect the USB cable and firmly press the rubber cover back into place to ensure waterproof integrity.



Figure 4.2: A close-up view of the ThruNite TC12 flashlight's Micro USB charging port, located on the side of the head and protected by a rubber cover.

5. OPERATION

The ThruNite TC12 features two switches: a tail switch for power ON/OFF and a side switch for mode selection.

5.1 Power ON/OFF

- To turn the flashlight **ON** or **OFF**, press the tail switch.



Figure 5.1: The tail switch of the ThruNite TC12 flashlight, used for basic power control.

5.2 Mode Switching

While the flashlight is ON, press the side switch to cycle through the following modes **Firefly** → **Low** → **Medium** → **High** → **Turbo**.



Figure 5.2: The side switch on the ThruNite TC12 flashlight, used for cycling through different brightness modes.

5.3 Strobe Mode

- While the flashlight is ON, press and hold the side switch for approximately 1 second to activate **Strobe mode** (12.5Hz).
- To exit Strobe mode and return to the previously used normal mode, press the side switch again.

6. MAINTENANCE

- **Cleaning:** Clean the flashlight body and lens with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **O-rings:** Periodically inspect the O-rings for wear and tear. Replace them with the provided spare O-rings if necessary to maintain the waterproof seal. Apply silicone grease to the O-rings to keep them supple.
- **Threads:** Keep the threads clean and lubricated to ensure smooth operation of the tail cap.
- **Battery Care:** If the flashlight will not be used for an extended period, remove the battery to prevent potential leakage. Store the battery in a cool, dry place.
- **USB Port:** Ensure the rubber cover for the USB port is securely closed when not charging to prevent dust and water ingress.

7. TROUBLESHOOTING

7.1 Flashlight Not Turning On

- Ensure the battery is inserted correctly with the positive (+) end facing the head.
- Check if the battery is fully charged. If not, charge it using the USB port.
- Tighten the tail cap and head of the flashlight firmly. Loose connections can prevent operation.
- Clean the battery contacts and flashlight threads with a clean cloth.

7.2 Intermittent Operation or Flickering

- This often indicates a low battery. Recharge the battery.
- Ensure all connections (tail cap, head) are tight.
- Clean battery contacts and threads.

7.3 Overheating

- The TC12 is equipped with Intelligent Temperature Control (ITC) Technology. If the flashlight reaches 80°C, it will automatically reduce its output to prevent damage and extend LED lifespan. This is normal operation.
- If the flashlight becomes excessively hot during normal use at lower modes, contact customer support.

8. SAFETY INFORMATION

- Do not shine the flashlight directly into eyes. The powerful beam can cause temporary vision impairment.
- Keep out of reach of children.
- Do not disassemble the flashlight head or modify the internal components, as this may void the warranty and cause damage.

- Use only recommended 18650 batteries.
- Ensure the USB port cover is sealed when not charging to maintain water resistance.
- Avoid exposing the flashlight to extreme temperatures or direct sunlight for prolonged periods.

9. WARRANTY AND SUPPORT

ThruNite products are manufactured to high-quality standards. For warranty information, technical support, or service inquiries, please visit the official ThruNite website or contact their customer service department. Please retain your proof of purchase for warranty claims.

ThruNite Official Website: www.thrunite.com