

NEXTORCH K33 UV

NEXTORCH K33 UV Pen Light User Manual

Model: K33 UV

1. INTRODUCTION

The NEXTORCH K33 UV Pen Light is a high-performance, rechargeable ultraviolet flashlight designed for a wide range of professional and personal applications. Featuring a pure 365 nm UV light source and a black glass filter, it provides strong penetration and clear fluorescence observation, enhancing detection accuracy. Its robust aluminum alloy construction ensures durability, while its compact design offers portability and ease of use.



Figure 1: NEXTORCH K33 UV Pen Light

2. IMPORTANT SAFETY PRECAUTIONS

Please read and understand all safety information before using the NEXTORCH K33 UV Pen Light. Improper use can result in injury or damage to the device.

- **Eye Protection:** Avoid direct exposure of UV light to eyes. UV light can be harmful to vision. Do not shine

the light directly into anyone's eyes.

- **Children:** Keep the device out of reach of children.
- **Disassembly:** Do not attempt to disassemble, incinerate, or heat the battery above 60°C (140°F).
- **Battery Safety:** If the battery expands, stop using it. Do not swallow the battery.
- **Proper Use:** Use the flashlight only for its intended purposes as described in this manual.

3. SETUP

3.1 Battery Installation

The K33 UV Pen Light supports both the included 10880 Li-ion rechargeable battery and two standard AAA alkaline batteries. For optimal performance and rechargeability, use the provided 10880 Li-ion battery.

1. Unscrew the tail cap of the flashlight.
2. Insert the 10880 Li-ion battery with the positive (+) end facing towards the head of the flashlight. If using AAA batteries, ensure correct polarity as indicated inside the battery compartment.
3. Screw the tail cap back on securely.

Waterproof & Impact-resistant

For Reliable & Steady Use

1 meter (IPX7) waterproof and impact resistant, sufficient to ensure K33 UV still work normally in unexpected rains and daily collisions



Figure 2: Battery Compartment and Dual Power Solution

3.2 Charging the Battery

The included 10880 Li-ion battery features a direct USB-C charging port. Use the provided USB-C charging cable to recharge the battery.

1. Remove the 10880 Li-ion battery from the flashlight.
2. Connect the USB-C end of the charging cable to the port on the battery.
3. Connect the USB-A end of the cable to a compatible USB power source (e.g., computer, wall adapter).
4. The battery will indicate charging status (refer to battery's specific indicator if available).

Your browser does not support the video tag.

Video 1: Demonstrates battery installation, charging, and basic operation of the K33 UV Pen Light.

4. OPERATING INSTRUCTIONS

4.1 Power On/Off and Mode Switching

The K33 UV Pen Light features a tail-press anti-slip switch for intuitive control.

- **Momentary On:** Half-press the tail switch to activate the light momentarily. Release to turn off.
- **Constant On:** Fully press the tail switch until it clicks to turn the light on constantly. Press again to turn off.
- **Mode Switching (Method 1 - From Off State):** Half-press continuously to preview the available modes (High Brightness, Low Brightness). Fully press the switch to lock the current mode.
- **Mode Switching (Method 2 - In Constant Light State):** While the light is on, fully press the switch continuously within 2 seconds to cycle through the modes.

Tail-press Anti-slip Switch

Clear logic, simple operation, and the raised texture on the switch effectively prevents slipping, even wearing gloves will not affect the operation



High Brightness



Low Brightness

Momentary On

Half press for momentary on
Release for off

Mode Switching

Method 1: In the off state, half press continuously to preview the mode, and fully press the switch to lock the current mode

Method 2: In the constant light state, fully press continuously within 2 seconds to switch modes

Figure 3: Tail-press Anti-slip Switch and Mode Operation

5. APPLICATIONS

The K33 UV Pen Light's pure 365 nm UV output and black glass filter make it highly effective for various detection and inspection tasks:

5.1 Document Inspection & Authenticity Identification

Helps identify fake documents, counterfeit currency, and other items by revealing security features that fluoresce under UV light. Widely used for authenticating jade, amber, bills, and commemorative banknotes.

Wide Range of Uses, Comprehensive Escort



Document Inspection

Help identify fake documents and fake license plates to improve work efficiency

Evidence Collection

Collect hidden evidence such as fingerprints, liquids and other traces during on-site surveys



Figure 4: Document Inspection and Evidence Collection

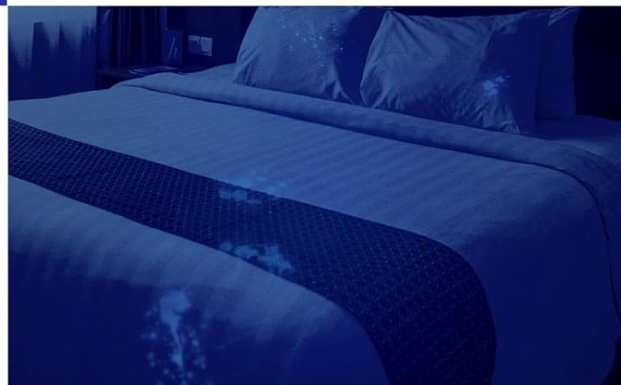


Authenticity Identification

Widely used in authenticity identification of jade, amber, bills, commemorative banknotes and other items

Hygiene Inspection

Easily judge the cleanliness of your home or hotel, and live more safely



Pet Health Management

Regularly check the skin condition of pets to detect potential health problems in time

Figure 5: Authenticity Identification, Hygiene Inspection, and Pet Health Management

5.2 Evidence Collection

Collect hidden evidence such as fingerprints, liquids, and other traces during on-site surveys that are not visible to the naked eye but fluoresce under UV light.

5.3 Hygiene Inspection

Easily judge the cleanliness of your home, hotel rooms, or other environments by revealing mold, stains, and other biological residues that emit bright fluorescence under UV light.

5.4 Pet Health Management & Excrement Detection

Regularly check the skin condition of pets to detect potential fungal infections (ringworm) which fluoresce. Also effective for detecting pet urine stains on carpets or furniture, as cat urine will show a fluorescent reaction.

5.5 Resin Curing


The powerful 1300 mW UV light source is suitable for curing UV-sensitive resins, making it useful for various craft and repair applications.

Video 2: Demonstrates various applications including hygiene inspection, anti-counterfeiting, and pet detection.

6. MAINTENANCE

- **Cleaning:** Clean the flashlight body with a soft, damp cloth. Ensure the lens is free of dust and debris for optimal light output.
- **Waterproof & Drop-proof:** The K33 UV Pen Light is IPX7 waterproof (1 meter) and 1 meter drop-proof, ensuring stable performance in unexpected situations. However, avoid prolonged submersion or intentional drops from excessive heights.
- **Storage:** Store the flashlight in a cool, dry place when not in use. If storing for extended periods, remove the battery to prevent leakage.

K33 UV UV Penlight

ANSI / PLATO-FL1	One 10880 Li-ion Battery		Two AAA Alkaline Batteries	
	Low	High	Low	High
 Light Output	110 mW	1300 mW	110 mW	700 mW
 Run Time	8 h 15 min	1 h 30 min	7 h 45 min	2 h
 Impact Resistance	1 m			
 Waterproof	IPX7, 1 m			
Weight and Dimensions	Weight: 31 g / 1.09 oz (Without Battery)			
	Size: 142 mm (Length) × 16 mm (Head) × 13.2 mm (Diameter)			
Material	Light Source: UV LED(365 nm)			
	Aluminum Alloy			
Battery	One 10880 Battery or Two AAA Batteries			

Above tested specifications are strictly based on the standard of ANSI / PLATO-FL1. We tested it with one 10880 (650 mAh) Li-ion rechargeable battery and two AAA alkaline batteries in 23 °C ± 3 °C . The specifications might be different when using a different battery or testing in a different environment.

Figure 6: Waterproof and Impact-Resistant Design

7. TROUBLESHOOTING GUIDE

Issue	Possible Cause	Solution
Light does not turn on	Battery is dead or incorrectly installed.	Recharge or replace battery. Ensure correct polarity.
Light is dim	Battery low or in Low Brightness mode.	Recharge battery. Switch to High Brightness mode.
Light flickers	Loose tail cap or battery connection.	Tighten tail cap. Ensure battery is seated correctly.

8. PRODUCT SPECIFICATIONS

Feature	Detail
Light Source Type	UV LED (365 nm)
Light Output (High)	1300 mW (with 10880 Li-ion Battery)
Light Output (Low)	110 mW (with 10880 Li-ion Battery)
Run Time (High)	1 h 30 min (with 10880 Li-ion Battery)
Run Time (Low)	8 h 15 min (with 10880 Li-ion Battery)
Power Source	Rechargeable 10880 Li-ion Battery (included) or 2 AAA Alkaline Batteries
Material	Aluminum Alloy
Water Resistance Level	IPX7 (1 meter)
Impact Resistance	1 meter
Product Dimensions	5.66"D x 0.62"W x 0.51"H (142 mm Length x 16 mm Head x 13.2 mm Diameter)
Item Weight	3.52 ounces (31 g / 1.09 oz Without Battery)

Note: Above tested specifications are strictly based on the standard of ANSI / PLATO-FL1. We tested it with one 10880 (650 mAh) Li-ion rechargeable battery and two AAA alkaline batteries in 23°C ± 3°C. Specifications might be different when using a different battery or testing in a different environment.

9. WARRANTY AND CUSTOMER SUPPORT

NEXTORCH offers a five-year warranty on all flashlights. If you have any questions about the product, require technical assistance, or need to make a warranty claim, please feel free to contact NEXTORCH USA customer support. Refer to the contact information provided with your purchase or visit the official NEXTORCH website for details.