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**Nitecore GEM10UV**

# NITECORE GEM10UV Gem Identification Flashlight User Manual

**Model:** GEM10UV

**Brand:** Nitecore

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## INTRODUCTION

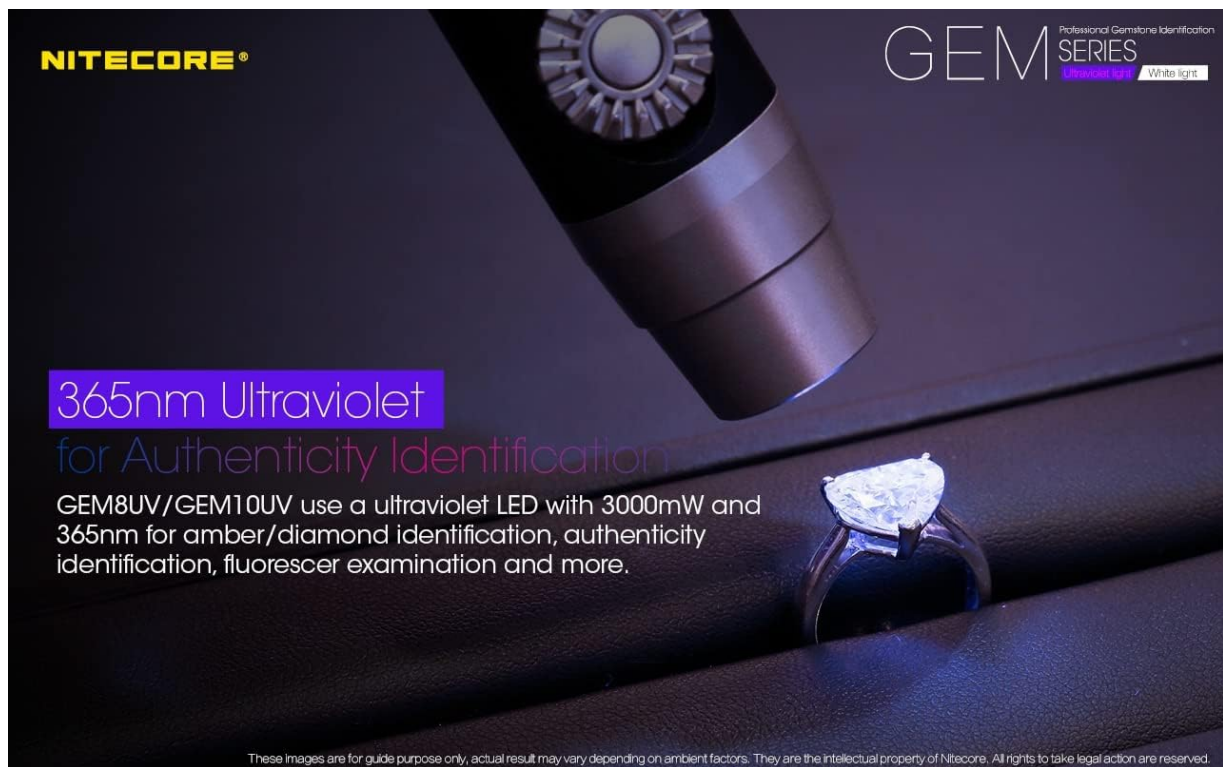
The NITECORE GEM10UV is a specialized ultraviolet (UV) flashlight designed for professional gem identification, currency verification, and forensic analysis. Its powerful UV LED and precise brightness control make it an essential tool for various applications requiring detailed inspection under UV light.



A sleek, black NITECORE GEM10UV flashlight with a silver rotary switch and bezel, showcasing its compact and ergonomic design.

## PRODUCT FEATURES

- **Powerful Ultraviolet LED:** Equipped with a 365nm UV LED, providing 3000mW of power for accurate identification of amber, diamonds, and other fluorescent materials.



The NITECORE GEM10UV flashlight emitting 365nm ultraviolet light onto a diamond ring, highlighting its use for authenticity and fluorescence identification.

- **Infinite Brightness Control:** A rotary switch allows for seamless adjustment of brightness levels, from ultralow to turbo, to suit different gemstone types and inspection requirements.



A detailed view of the flashlight's rotary switch, demonstrating its function for adjusting brightness levels. The design allows for easy operation, even when wearing gloves.

- **Compact and Lightweight Design:** Weighing only 2.34 ounces (without battery), its ergonomic design ensures comfortable one-handed operation.
- **Extended Runtime:** Capable of running for up to 500 hours on a single 18650 rechargeable battery. Also compatible with two CR123A or RCR123 batteries.



The NITECORE GEM10UV flashlight positioned beside an 18650 battery, emphasizing its impressive runtime of up to 500 hours and compatibility with various battery types.

- **Versatile Applications:** Ideal for gemstone identification, currency verification, forensic analysis, and security tasks.



A visual guide showing how different gemstones react under UV light: amber fluorescing, a diamond glowing blue, and natural jade appearing transparent, all illuminated by the GEM10UV.

- **Durable Construction:** Made from aluminum with an IPX8 waterproof rating, submersible up to 2 meters.

## SETUP

## Battery Installation

1. Unscrew the tail cap of the flashlight by turning it counter-clockwise.
2. Insert one 18650 Lithium-Ion battery with the positive (+) terminal facing towards the head of the flashlight, or two CR123A/RCR123 batteries with the positive (+) terminals facing towards the head.

*Note: Ensure correct battery polarity. Incorrect insertion can damage the device.*

3. Screw the tail cap back on clockwise until it is securely tightened.

## Included Accessories

The NITECORE GEM10UV comes with the following accessories:

- Holster
- Lanyard
- Spare O-ring

## OPERATION

### Power On/Off

To turn the flashlight on, rotate the rotary switch clockwise from the 'OFF' position. To turn it off, rotate the switch counter-clockwise back to the 'OFF' position.

### Brightness Adjustment

Once the flashlight is on, continue rotating the rotary switch clockwise to increase the brightness. Rotate it counter-clockwise to decrease the brightness. The brightness is infinitely variable, allowing for precise control.

## Recommended Uses

- **Gemstone Identification:** Observe fluorescence in diamonds, amber, and other minerals.
- **Currency Verification:** Detect security features on banknotes.
- **Forensic Analysis:** Identify bodily fluids or other trace evidence.
- **Security:** Aid in various security inspection tasks.

## MAINTENANCE

### Cleaning

Wipe the flashlight body with a clean, soft cloth. For stubborn dirt, a slightly damp cloth can be used. Do not use abrasive cleaners or solvents.

### O-Ring Lubrication

Periodically lubricate the O-rings with silicone grease to maintain the waterproof seal. Replace worn O-rings with the provided spare.

### Storage

When storing the flashlight for extended periods, remove the battery to prevent leakage and damage to the device.

## TROUBLESHOOTING

### Flashlight Does Not Turn On

- **Check Battery Installation:** Ensure the battery is inserted with correct polarity (+/-).
- **Battery Charge:** Verify that the battery is fully charged. Replace with a fresh battery if necessary.
- **Battery Type:** Confirm that you are using a compatible 18650 or CR123A/RCR123 battery. Note that some flat-top 18650 batteries may be too short; use button-top 18650s or those with protection circuits.
- **Tail Cap Connection:** Ensure the tail cap is fully tightened to establish electrical contact.

### Dim or Flickering Light

- **Low Battery:** The battery may be low. Recharge or replace the battery.
- **Loose Connections:** Tighten the tail cap and head assembly to ensure good electrical contact.
- **Dirty Contacts:** Clean the battery contacts and flashlight contact points with a cotton swab dipped in rubbing alcohol.

## SPECIFICATIONS

Feature	Detail
Model	GEM10UV
Light Source	Ultraviolet LED (365nm)
Light Source Wattage	3000 Milliwatts
Brightness	30000 millicandela (variable)
Power Source	Battery Powered
Compatible Batteries	1 x 18650 Lithium Ion or 2 x CR123A/RCR123
Voltage	3 Volts
Runtime	Up to 500 hours (on lowest setting with 18650)
Material	Aluminum
Color	Black
Item Weight	2.34 ounces (without battery)
Dimensions (LxWxH)	1 x 1 x 5 inches
Water Resistance	IPX8 (2m submersible)
Special Features	Adjustable Brightness, Easy To Use

## WARRANTY AND SUPPORT

### Manufacturer's Warranty

The NITECORE GEM10UV is covered by a **5-year manufacturer's warranty** from the date of purchase.

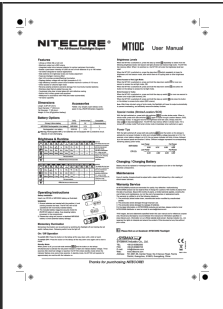

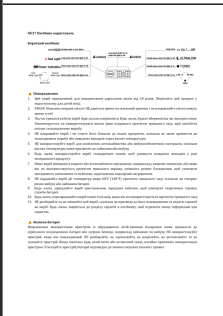
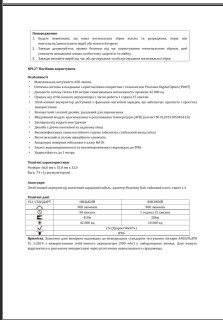
This warranty covers defects in materials and workmanship under normal use.

For warranty claims or technical support, please contact Nitecore customer service or visit their official website.



Proposition 65 Warning

**WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Related Documents - GEM10UV

	<p><a href="#">NITECORE MT10C User Manual: Features, Specifications, and Operation Guide</a></p> <p>Detailed user manual for the NITECORE MT10C flashlight. Covers features, brightness levels, runtime charts, battery compatibility, operating instructions, maintenance, and warranty information.</p>
	<p><a href="#">NITECORE TINI3 LED Flashlight User Manual</a></p> <p>User manual for the NITECORE TINI3 compact LED flashlight, detailing its features, specifications, operation modes (including brightness levels, color temperatures, and lockout functions), charging instructions, advanced temperature regulation, power indication, and warranty service. Includes safety warnings and disposal information.</p>
	<p><a href="#">Nitecore NU27 MCT: Посібник користувача, характеристики та інструкції</a></p> <p>Детальний посібник користувача для ліхтаря Nitecore NU27 MCT. Дізнайтеся про функції, технічні характеристики, безпеку та інструкції з експлуатації.</p>
	<p><a href="#">Посібник користувача Nitecore NPL27: Особливості, характеристики та експлуатація</a></p> <p>Детальний посібник користувача для тактичного ліхтаря Nitecore NPL27. Дізнайтеся про його особливості, технічні характеристики, функції зарядки, встановлення та безпечне використання.</p>



	<p><a href="#">Nitecore NU25 / NU25 UL Dual Beam USB-C Rechargeable Headlamp User Manual</a></p> <p>User manual for the Nitecore NU25 and NU25 UL dual beam USB-C rechargeable headlamps. Details features, specifications, charging, operation modes (spotlight, floodlight, red light, SOS, beacon), power indication, warnings, and warranty.</p>
	<p><a href="#">NITECORE P20iX Tactical Flashlight - 4000 Lumens, USB-C Rechargeable</a></p> <p>User manual for the NITECORE P20iX tactical flashlight, detailing its features, specifications, operating instructions, and maintenance. Discover its 4000-lumen output, USB-C charging, STROBE READY technology, and dual user modes.</p>