Flashlights Unlimited
Xenopus Electronix
Deep Purple 405 Multimode Inspection Lantern
Operations Guide

The new Deep Purple Multimode Inspection Lantern offers all of these advantages over our earlier models:

Dual Brightness Levels, Switch Selectable
Beam Smoothing Faceted Emitter Lenses
Longer Operating Time Between Recharges
Dramatically Shorter Recharging Intervals
Brighter White Secondary Navigation Beam
More Convenient Handle & Switch Trigger
Universal Voltage AC Fast Charger Module
Optional International Power Plug Adapters

Important! **Carefully read this entire manual before attempting to operate your new lantern. Failure to do so may result in reduced lantern life, voided warranty, fire hazard, property damage, personal injury or death.**

Flashlights Unlimited
3298 Oakcliff Road
Doraville GA 30340
tel 1-770-446-7561
fax 1-770-446-7604

Flashlights Unlimited / Xenopus Electronix Deep Purple 405 Multimode Inspection Lanterns & Kits

Description

When performing fluorescent integrity inspections of marine coatings in very large area environments such as water tanks, a powerful light source is required. But conventional UltraViolet sources can be extremely hazardous to eyes and skin. Now there is a safer alternative, the Xenopus Electronix 405nm Deep Purple Inspection Lantern. With six high-flux LEDs, this rugged hand-held unit provides the smooth beam image and extended range you need for this specialized application. Made especially for Flashlights Unlimited, the new XE-405M lantern may also be appropriate for other applications, in situations where a suitable fluorescent response can be achieved with the longer and less dangerous 405nm peak wavelength. Cooler running and lighter in weight than hot and heavy high-intensity UV lamps. The universal rechargeable design provides convenient cordless operation, while reducing operating costs.

Features

✧ 6 high-flux LEDs with special lenses for a smooth, powerful beam.
✧ The purple beam color is safer for eyes and skin than UltraViolet.
✧ Perfect for inspection of Sherwin-Williams™ OAP marine coatings.
✧ Peak wavelength is 405nm, overall bandwidth is 400nm to 410nm.
✧ Conservatively-driven LEDs have 10,000+ hour typical lifespan.
✧ Power regulation circuitry maintains consistent beam brightness.
✧ Convenient pistol-grip trigger switch with continuous-on latch.
✧ 3 operating modes: purple low beam, purple high beam, and white.
✧ Supplemental white beam lets you navigate easily in dark areas.
✧ Tech-replaceable long-life sealed-lead-acid rechargeable battery.
✧ Delivers 90 minutes or 3 hours of runtime from a full charge.
✧ Flashing primary beam lets you know it is time to recharge.
✧ Universal smart rapid charger provides fast battery recovery.
✧ Can also be recharged from 120VAC @ 60Hz (cord not included).
✧ Indicator LEDs let you know when full recharge is completed.
✧ The rugged housing is splash-resistant (but not submersible).
✧ Recessed scratch-resistant glass front lens with o-ring seal.
✧ Rubber molding on handle grip, lens bezel, and case back.
✧ Kit includes molded carrying case and yellow filter glasses.
✧ One-year limited factory warranty from Flashlights Unlimited.

Products

Xenopus 410 Lanterns & Kits	Item No.
Xenopus Electronix 405 Lantern Only with a universal-voltage smart rapid charger module	XE-405M-L
Xenopus Electronix 405 Lantern Kit with a molded carrying case and yellow filter glasses	XE-405M-K

Xenopus 410 Accessory Items	Item No.
Wrap-Around Filter Glasses - Yellow improves fluorescent contrast and blocks purple glare	EX-WG-Y
International Power Plug Adapter Kit recharge the lantern from AC outlets across the globe	FU-IPK

IMPORTANT SAFETY INFORMATION !

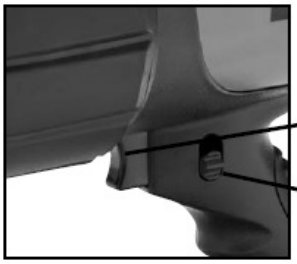
1. Fully read and understand this instruction guide before operating your new lantern. Retain this guide for future reference and support.
2. Do not operate or charge the lantern in rain or in wet locations.
3. The lantern is splash-resistant, but do not immerse in any liquid.
4. Keep the lantern away from children. This instrument is not a toy.
5. The lantern emits extremely intense light. DO NOT look directly into the beam during operation, and avoid strong beam reflections.
6. Fully charge the new lantern before using it for the first time.
7. Recharge the lantern after each use, or once every sixty days. See the operating instructions which follow for proper charging technique.
8. The lantern contains a sealed lead acid rechargeable battery that must be disposed of properly at its end of life. To locate a nearby battery recycling center, please call (toll free) 1-877-2-RECYCLE.
9. Do not drop the lantern, as damage to the lens or other elements may occur. Do not attempt to operate or charge the lantern if it is damaged.
10. Contact Flashlights Unlimited for technical assistance or to acquire replacement parts or service. Call 1-770-446-7561 or fax 1-770-446-7604, or visit our Feedback web page at flashlightsunlimited.com/feedback.htm.

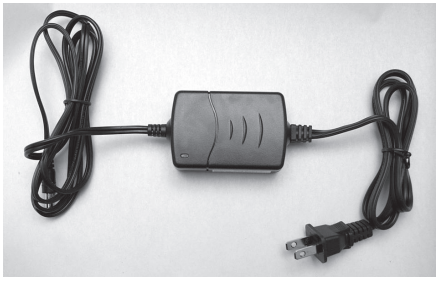
OPERATION

A push-button trigger switch, located near the top of the pistol grip handle, controls the operation of the purple and white beams. Push and hold the switch once to start the lantern in purple low-beam mode (with three of the 405nm LEDs activated). Release the trigger, and then press and hold it again to start the lantern in purple high-beam mode (with all six 405nm LEDs activated). Release the trigger, and then press and hold it a third time to start the lantern in white high-beam mode (with only the ultra-high-flux white LED activated). The primary purple beam can be continuously operated for up to 90 minutes on high beam, or up to three hours on low beam, from a full battery charge. The secondary white beam can be operated for up to 3 hours from a full battery charge. A small lever located near the trigger can be pushed upwards with the thumb while the trigger is depressed, this will lock the switch for continuous operation in the currently selected mode. Slide the locking lever back down to release the trigger and turn off the lantern. The locking lever can also be applied with the trigger off, to prevent accidental actuation during transport. Never operate the lantern during charging. The purple beam will begin to flash intermittently when the battery charge is depleted. Immediately turn off the lantern and fully recharge it, to avoid reducing the operating life of the rechargeable battery (do not wait until the LEDs shut down completely).

CHARGING

DO NOT attempt to operate the lantern during charging. The lantern has two input ports for charging power. Never use more than one of these two recharging ports at any one time, doing so will damage the lantern and void the warranty. Whenever possible, use the universal smart charger module to recharge the lantern, this method will be several hours faster than slow charging. First plug the smart charger module into an appropriate power outlet (from 100VAC to 240VAC, at 50Hz or 60Hz line frequency), and watch for the green indicator light on the module. Next plug the charger power cord into the small port on the underside of the lantern near the switch trigger, and watch for the indicator light on the module to turn red. When the indicator light turns green again (typically within less than three hours) the lantern is fully recharged, and you can remove the charger cord from the lantern and then the power cord from the wall outlet. If the smart charger module becomes lost or damaged, the lantern can instead be charged from the internal slow charger port, which is located on the back of the lantern housing under a protective rubber cover. A cord is not provided for this, use a UL-approved two-prong or three-prong power cord, and attach it only to a 120VAC 60Hz linepower outlet (use of any other voltage will damage the lantern and void the warranty). A red indicator located at the top rear of the lantern housing will light when the unit is charging. When the battery has been fully recharged, the red indicator light will flash. The battery cannot be overcharged by the internal circuitry, and no damage will occur if the unit is left charging for an extended period. Unplug the cord and replace the protective cover on the 120VAC port when charging is done, to prevent the intrusion of dirt or moisture.





UNIVERSAL VOLTAGE
SLA SMART RAPID
CHARGER MODULE

CASE CLEANING

Over time, dirt and fingerprints may accumulate on the lantern. If necessary, clean the lantern with a soft clean oil-free cloth moistened with household window cleaner. Do not use any strong solvent based cleaners on the plastic surfaces, as this may damage the finishes. Do not allow liquids of any kind to enter the lantern through switch or power port openings.

BATTERY CARE

Lead-acid batteries require recharging on a regular basis, to maintain a full charge and to ensure good battery life. All lead-acid batteries will self-discharge over time, and this happens more rapidly when they are stored at higher temperatures. Therefore, these types of batteries need periodic charging to replace energy lost through self-discharge. When the lantern is not in use, its battery should be recharged at least every once every sixty days. The battery should also be recharged as soon as possible after each use. If the battery remains in a discharged state, its useful life will be significantly reduced. Recharging the battery after each use will prolong its life; frequent heavy discharges between recharges will reduce battery life. The battery cannot be overcharged, so there will be no damage from extended charging cycles. The time required to fully recharge the battery depends upon the discharge status of the battery after use or storage, and upon which charging port is used.

BATTERY REPLACEMENT

The battery should be replaced when it will not hold a charge or power the lantern. The rechargeable battery can be replaced only by skilled technical personnel. Complete disassembly of the lantern housing is required, and this should never be attempted by users who are not well-skilled in electrical and mechanical assembly procedures. *You can return your lantern to the factory for battery replacement, for a flat-rate fee that includes return shipping costs.* Always disconnect the charger power cords from both the lantern and power outlets before disassembling the lantern. You will need the proprietary 6-volt, 3-ampere-hour sealed-lead-acid replacement battery, plus a Phillips blade screwdriver (number 1 size). No soldering is required, but some other tools, such as needle-nosed pliers, may be helpful. Note that if you damage any part of the lantern, it will be necessary to return it to the factory, and additional service fees will be applied, depending upon the extent of damage. Contact us for instructions if you want to return your lantern(s) for battery replacement.

BATTERY RECYCLING

The non-spillable Sealed-Lead-Acid (SLA) battery is fully recyclable, and can be taken to any location that accepts common automotive starter batteries for recycling. Examples of places that accept these batteries are: county or municipal recycling drop-off centers, scrap metal dealers, and retailers who sell automotive batteries. To locate your nearest battery recycling center, please call (toll free) 1-877-2-RECYCLE. Do not dispose of the battery in fire (as this could result in an explosion). Before recycling the old battery, protect its exposed terminals with heavy-duty electrical tape to prevent a short circuit (as this may result in injury or fire). Do not discard the battery with household trash; failure to comply with local, state, or federal regulations may result in fines and/or imprisonment.

OPERATIONS HISTORY

Activity Log and Usage Notes forms are provided with this manual, for users who wish to track the history of operations or performance for each lantern. You may copy the forms as needed.

LANTERN SPECIFICATIONS

Lantern Weight	2 lb 9 oz (1.16 kg)
Overall Height	7.75 in (19.68 cm)
Overall Length	8.25 in (20.96 cm)
Lamp Head Diameter	4.00 in (10.16 cm)
Rechargeable Battery	6V 3AH SLA (tech replaceable)
Purple Beam Source	6 1-Watt 405nm LEDs (hex array)
Purple Beam Runtime	up to 3 hours from full charge
White Beam Source	1 3-Watt Cree Hi-Flux White LED
White Beam Runtime	up to 3 hours from full charge
Recharge Intervals	3 hours (Fast), 12 hours (Slow)
Fast Charger Input	100 to 240VAC @ 50 to 60Hz, 36W
Slow Charger Input	120VAC @ 60Hz only, 9W

ACTIVITY LOG	UNIT #

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