

I. LABINO THE COMPANY

Labino AB is a Swedish-American, family owned company dedicated to the development and manufacture of UV lamps since 1994. Since its inception, Labino AB has been committed to high standards of quality in the design and manufacture of new innovative products, helping NDT professionals worldwide to make the world a safer place. Labino AB high quality lights are designed to comply with all relevant international and ASTM standards, and are distributed to over 55 countries worldwide.

Labino AB UV lights are used in multiple applications, industrial as well as non-industrial such as Nondestructive Testing, Medical Laboratories, Crime Laboratories, Forensics, UV Curing, Leak Detection and others. Labino is committed to environmentally friendly technologies and materials.

Labino is a proud member of:

ASTM

ISO

Nadcap

ASNT

2. MODELS AVAILABLE

Labino offers seven different Torch Lights. Six UV versions and one white light torch. UVG2 is equipped with a clear glass filter and UVG3 with white light protection filter (used for NDT). Both UV torches are available with three different reflectors, Spotlight, Midlight and Floodlight.



For information about spare parts and accessories please visit www.labino.com

3. UNPACKING THE EQUIPMENT

Check that the lamp has not been damaged during transport. In the event of external damage to the PACKAGE, do not accept the package from the freight company.

In the event of external damage to the PRODUCT, please contact the supplier without testing whether the lamp works.

Make sure that no part is missing. If a part is missing contact your supplier.

4. TRANSPORTATION OF THE EQUIPMENT



Warning! Shipping of batteries:

Make sure you ship all products including lithium batteries according to IATA Dangerous Goods Regulations (DGR). DO NOT ship broken lithium batteries. Broken batteries shall be disposed in accordance with local waste disposal regulations.

5. HANDLING OF THE EQUIPMENT / INTENDED USE

Although the lamp is very sturdy, in view of the extensive electronic equipment it contains, it should nevertheless be treated with a certain amount of care.

The lamp can be switched on and off at any interval.

Cleaning - do not disassemble unit for cleaning

Exterior surfaces should be cleaned with a soft lint free cloth and mild detergent. Isopropanol and a microfiber cloth shall be used to perform the cleaning of the filters. Disassembly voids warranty.

Temperature

Make sure the unit has good ventilation. Do not mount the unit at a closed compartment and do not cover any part of the unit. The unit is cooled by convection to surrounding air, remove all obstacles for efficient convection.

Maximum ambient temperature 40 degrees Celsius.

Intended use

Intended use of the UV torches is to inspect an object by irradiating the surface with UV emitted from the light source. The light is specially designed to perform Non Destructive Testing – Magnetic Particle Inspection or Penetrant Inspection. The user should always wear UV blocking eye protection when using the UV light.

Charging the batteries in external battery charger:

- 1. Dismount batteries by unscrewing the end cap in the back of the torch.
- 2. Remove battery from slot.
- 3. Connect AC adapter to mains outlet.
- 4. Connect AC adapter circular DC jack to charger
- 5. Observe battery polarity when inserting the batteries into the charger. Misplacement of the batteries in the charger can damage the charger.
- 6. Place battery in charging dock and make a gentle push.
- 7. Three different states of the Labino charger.
 - a. Charger connected in an empty state, no battery in charger the LED blinks slowly Red/Green
 - b. Discharged battery, less than 3.8 V, the LED shows a steady red light, changing to green when fully charged
 - c. Fully charged battery (more than 3.9V) inserted in the charger, the LED is blinking Red/Green fast, or shows a steady Green light



6. TECHNICAL DATA

Weight including battery	226 gr (9.402 oz)
Battery	• I x 3.6 VDC • Operating time 3 hours • 3350 mAh Lithium-ion
Charging time	Usage of the external charger provided charges the batteries fully within 4 hours.
Peak wavelength (UV)	365 nm +/- 5 nm
Visible light from UV LED	At 380 mm distance = I Lux (0.1 fc)
White light from white LED	At 380 mm distance = 90 Lux (8.4 fc)

7. STORAGE AND DISPOSAL

- Store the UVG Torch Light and extra batteries in a dry and cool environment (below 30°C).
- Store and handle batteries with care, keep away conductive objects that can short cut battery.
- Do not dispose battery in fire or water.
- Consumed batteries shall be recycled at local waste disposal sites.

8. WARNING AND UV SAFETY





General UV Safety Information

UVA light can cause burn injuries. The exposure to light should be considered with care.

Unprotected and prolonged exposure to any form of UV light, including UV-A, can result in skin injuries, cataracts and possibly cancer. Even brief exposure can be hazardous if the UV intensity is very high.

UV is Dangerous - Protect yourself!

It is advised to always shield the eyes/face. For maximum protection and whenever possible hands and arms should also be covered with long sleeves and gloves of a non-fluorescent material.

- UV Goggles: It is of utter importance to use the UV protection. To protect your eyes use UV Blocking Goggles. There are different goggles on the market, enclosed with this lamp you will find UV safety Goggles that absorbs 99.9 % of all UV up to 385 nm the best there is on the market.
- **Visor:** To take extra caution, use a UV block visor that absorbs 99.9 % of all UV up to 385 nm.
- **Gloves:** Be sure to use gloves that protect you not only from chemicals or cuts, but from UV. And make sure that they do not fluoresce.
- Apron: To protect your body in the best way please use an industry apron with 100 % UV block.

Artificial UV Light

Artificial UV light is often regarded as something completely different from the sun's radiation, which it is not. As a result, recommended hygienic exposure times have

been calculated for these types of UV-sources, the aim being to prevent injuries and increase safety awareness when working with artificial UV. Artificial UV, such as that emitted from Labino UV lamps, should be regarded as natural UV, i.e. sunlight, and appropriate safety measures should be taken accordingly. Artificial UV sources are used in many industries for many applications. UV is used in combination with a fluorescent media, which is excited by the UV energy and "reflects" light in the visible range of the electromagnetic spectrum.

Sensitivity

Certain individuals are naturally hypersensitive to all forms of UV and should avoid any exposure. In general, if itching, inflammation or other unusual symptoms occur, UV exposure should cease immediately. People using certain drugs that produce photosensitivity should avoid exposure to all UV sources.

Safety standard

According to EN 62471 all models of Labino UVG2-3 complies with Risk Group 3, High Risk.

Heat

Unit generates heat that needs to dissipate though convection. Do not cover unit when operating.

Battery Safety!

Never charge the battery with any other charger than the original charger that comes with the delivery. Usage of a non-Labino battery can cause serious damage to the user and lamp.



Warning! Shipping of batteries. Make sure you ship all products including lithium batteries according to IATA Dangerous Goods Regulations (DGR). DO NOT ship broken lithium batteries. Broken batteries shall be disposed in accordance with local waste disposal regulations.

9. UV LIGHT SOURCE PERFORMANCE

The UVG2 and 3 torch offers a spectral transmittance in range 315-400 nm with a peak at 365 + 1.5 nm. The narrow peak creates an effect with an unbeatable response from any fluorescent media.