

NuArc 32-1K Exposure Unit

Cautions

- UV Eye protection is required
- UV blocking curtain must be shut when the Exposure Unit is in use.
- Only operators trained in the safe operation of the Exposure Unit are allowed to use it.
- Do not place anything on top of the unit that will cover the cooling fan.

Description and Uses

The 32-1k Exposure Unit is used to deliver high intensity volumes of Ultra Violet light for a variable period of time (called “light units”) in order to cure, and/or expose an image from positive film to a light sensitive emulsion (which in turn can then be further processed and printed from).

Standard Operations

Note: only those individuals that have received proper training are allowed to use the Exposure Unit. Please refer to training demonstrations for specifics about materials and settings.

The Exposure unit should be inspected before use to ensure that all parts are in working order and that the area is tidy and free of all other hazards.

Loading/ Unloading materials

1. With the unit off, open the latch on the handle and raise the glass cover using two hands to support the weight of the lid. The lid is very heavy and includes: a large piece of glass, the frame holding the glass and the lamp unit above the glass. Pneumatic air pistons will assist with the weight of the glass cover and will prevent the lid from falling down once it has been raised. Care should be taken to ensure that the lid does not fall while loading or unloading materials.
2. Place the materials to be exposed on the rubber blanket in the exposure unit.

3. Close the lid, while supporting the weight of the lid with both hands. Carefully push the lid down and lock the latch on the handle.

Exposing Materials

1. Ask people near the exposure unit to move away. It is recommended that the operator wear UV protective glasses while running the Exposure Unit.
2. Load the materials (see above).
3. Press the power button to turn the unit on.
4. Activate the vacuum by pressing the "VACUUM" button. An excellent vacuum of 20-25 is generally attained in 30-40 seconds. The flexible rubber blanket will rise up and surround the materials under the lid.
5. Using the keypad, press the proper numerical keys to enter the light units needed for exposure. The LED display will show the entered light units.
6. To activate the exposure lamp press the "S" key and draw the UV protective curtain closed.

Note: there is a built-in delay of 30 seconds between exposures to allow the lamp to cool sufficiently. If you press the "S" key and the lamp does not come on immediately, then the lamp has not cooled down enough. Do not turn the unit off or press the "S" key again. The lamp will activate automatically once it is sufficiently cool.

7. To adjust time, press "C" for cancel and enter the new time.
8. When the exposure is complete, the lamp shuts off automatically and resets the light units entered.
9. Unload the materials (see above).
10. Press the power button to the unit to turn it off after 30 seconds to allow the lamp to cool.

Further Considerations

- Ask other workers to move away from the unit while in use.
- Check the UV curtain for tears or holes before every use.

- Ensure that the glass lid is not cracked or chipped. Pressure on damaged glass can cause the glass to shatter leading to possible injury and property damage.
- Ensure that the area around Exposure Unit is clear of other items or hazards. Reflective devices should not be stored in the Exposure Unit's cubical.
- Make certain that nothing is placed on top of the unit that will cover the cooling fan.
- If the Exposure Unit is not operating correctly turn the unit off and notify your supervisor immediately. Do not attempt to operate again until corrective action has been taken and documented. Only supervisors are trained and are permitted to replace a malfunctioning lamp.

Hazards

Eye and Skin Damage may result from direct viewing of, or exposure to Lamp in this unit. The lamp can cause serious skin burns and eye inflammation from shortwave ultraviolet radiation.