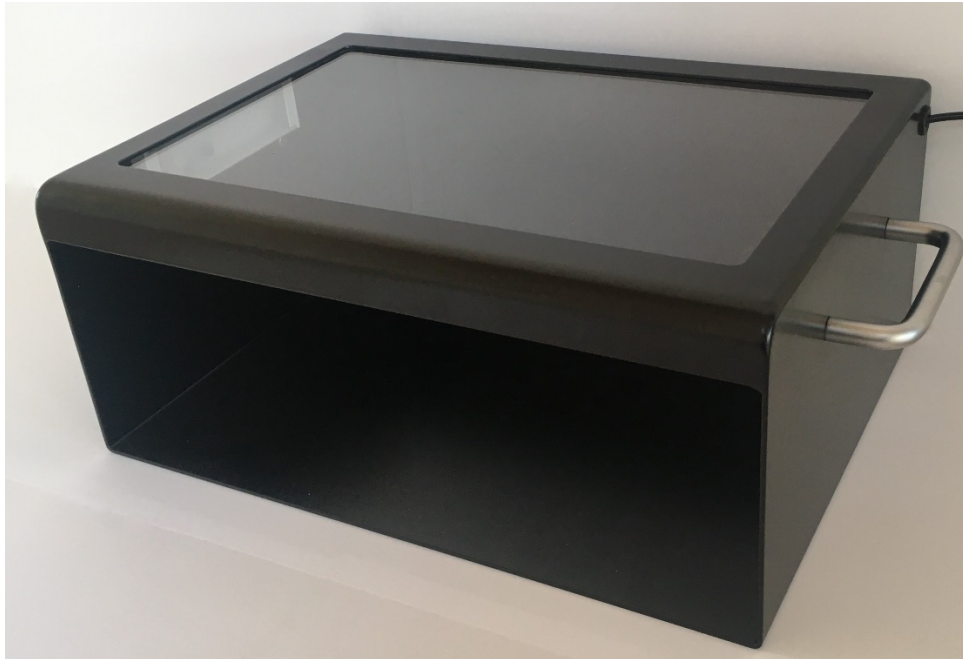


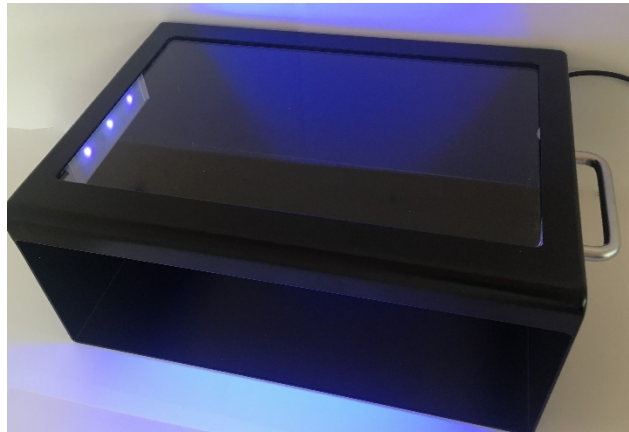
Hand hygiene training and inspection



UVA LED screen

**Operator's Manual
(maintenance, use and safety)**

Congratulation on your new hand training screen.
We hope it will benefit and help improve hand hygiene



To prevent accident or injury, read this manual carefully.

It is important that instructions are followed and that warnings are taken seriously before using the equipment. If you have any questions regarding the instructions or warnings, please call +45 22 680 680.

This manual should always be accessible to all operators and maintenance personnel.

The UVA LED screen is designed for use with a fluorescent hand spray or lotion, for training hand hygiene.

It must not be used for other purposes.

Disclaimer

Natural Disinfection ApS cannot accept responsibility for damage due to improper use or use of products other than those intended.

Due to our ongoing product development policy, we reserve the right to change specifications and technical data, therefore the information in this manual may be changed without notice.

1. Health and safety

1.1 UV light exposure



Overexposure to UVA light can cause undesirable side effects such as erythema (sunburn), eye inflammation and photokeratitis (photosensitive) for a short time (acute effect) and can cause premature aging of the skin, skin cancer and cataracts, as a result of repeated prolonged exposure (chronic effect).

The key to avoid overexposure is by following these instructions

Commercial UV light exposure is in the EU, established by Artificial Optical Radiation Directive 2006/25/EC. It contains the applicable rules on UV light limits.

If people are exposed to UV light from artificial sources, it is necessary to assess the level of risk of undesirable health effects by establishing a personal UV light exposure level and comparing it with the exposure limits.

When the personal UV light exposure level meets the exposure limit values, the risk may be considered low for most of the population and should be controlled as far as possible.

If the personal UV light exposure exceeds the exposure limit, additional control measures must be implemented to reduce the exposure to the value limits below.

1.2 Control measures

The purpose is to ensure that the UV light exposure limits for unprotected skin and eyes should not be exceeded by some people. This can be done through control measures.

a) **Conscious risk**

Persons who may be exposed to unusual levels of UV light exposure limit or significant personal exposure must have adequate information and training to understand the associated risk to their health and safety precautions. Any person who detects any kind of abnormal or unwanted reaction that could be considered to be due to exposure to UV light should not be exposed to UV light in the future.

b) **Compliance with UV light exposure limit for unprotected skin and eyes in accordance with Artificial Optical Radiation Control, 2010.**

UV-light exposure limit is defined by the level of UV light which is below the level that is believed that almost all individuals may be exposed repeatedly without unwanted effect on health.

Some people may be photosensitive or exposed to photosensitizers and therefore the exposure limit may not be adequate protection. These individuals should seek medical advice for additional protective measures that may be required prior to any exposure to UV light.

It is necessary for the person in charge to limit the personal UV light exposure time to those listed in the table below to ensure that the maximum permitted exposure values for unprotected skin and eyes are NOT exceeded within an 8-hour period per day.

Limit values for working with this cabinet		
Distance from UV LED (mm)	Maximum permitted UV light over an 8-hour period per day	
	Uncovered skin	Uncovered eyes
100	40 minutes	1,5 minutes
200	80 minutes	3 minutes
500	160 minutes	16 minutes
1000	320 minutes	40 minutes
1500	8 hours (with eye protection)	80 minutes
2000		160 minutes (without eye protection)

The distance where the maximum allowable UV light exposure time is 8 hours, as the distance corresponding to the classification. At this distance and beyond, the exposure limit value used cannot be exceeded within an 8-hour period per day.

Using the UV LED cabinet, as described in the hand wash training procedure on page 7, results in such a low exposure that most individuals do not have to restrict their use. Smaller children and people who are unusually photosensitive or exposed to photosensitizers should limit their use of the UV LED cabinet to a ten-minute period during the 8 hours – this refers to the time the hands are inside the cabinet and exposed to UV light.

1.2 Fire

Never work in areas where there is a risk of flammable atmosphere

1.3 Explosion

Never work in an area where there is a danger of an explosive atmosphere

1.4 Electrical

Electrical equipment is potentially hazardous and can cause death or injury if the precautions are not taken before operation or maintenance.

Never work – if there is visible damage to the UV cabinet cables or connectors.

Always disconnect the power supply before maintenance.

2. Installation

The screen comes complete and ready to use.

Make sure all packaging is removed and look for damage.

3. Use

The cabinet must be used on a level surface and positioned so no persons can look directly into the UV LED cabinet.

Always check the following before use and, if in doubt, do not switch on.

3.1 Only use if

- The clear plastic panel is mounted over the LEDs in the sides.
- If there is no visible damage to the UV cabinet, cable or plug.
- UV light exposure value has been determined.

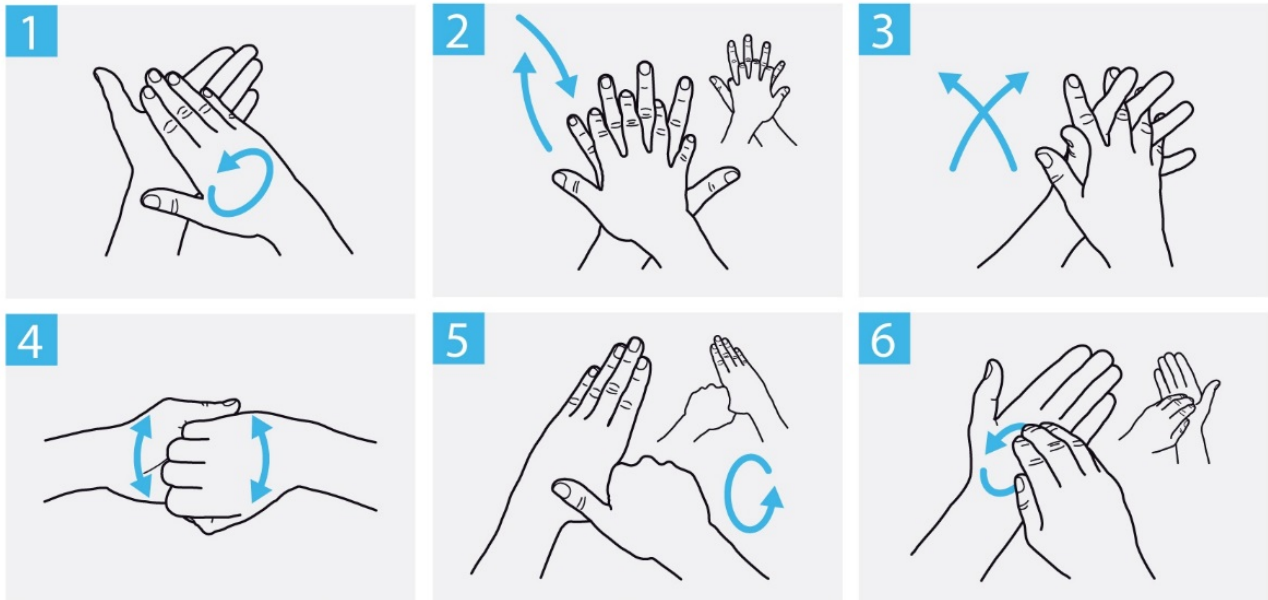
To turn on, plug in a standard socket and wait 30 seconds. Then the device is ready for use and the sensor will turn on the UV light when you insert your hands into the box. The UV LED will light up and achieve optimal strength immediately. The UV light turns off when the sensor does not detect motion for 5-10 seconds.

3.2 Hand wash training procedure

- a) Add 1-2 pumps of the fluorescent hand spray/ lotion and distribute it as with a normal thorough hand cleaning.
- b) Place your hands in the cabinet and check if they are fully covered, i.e. the entire surface of both hands should shine uniformly. Repeat if necessary, the process until the entire surface glows uniformly.
- c) Wash your hands thoroughly, dry and check in the cabinet again. The areas still glowing are not adequately washed.
- d) Learn the best technique for washing your hands on the next page.
- e) Repeat as needed and look for improvements.



3.2 Hand wash training



The process should take 40-60 seconds

4. Maintenance

Maintenance should only be performed by qualified personnel. Only use original spare parts supplied by Natural Disinfection ApS.

4.1 Cleaning

Keep the inside of the cabinet free of splashes and residues of the fluorescent liquid.

Wipe the cabinet with a damp cloth and an alcohol-based detergent.

5. Waste

Upon disposal, this cabinet must be handed over to a waste management system for electronic waste.

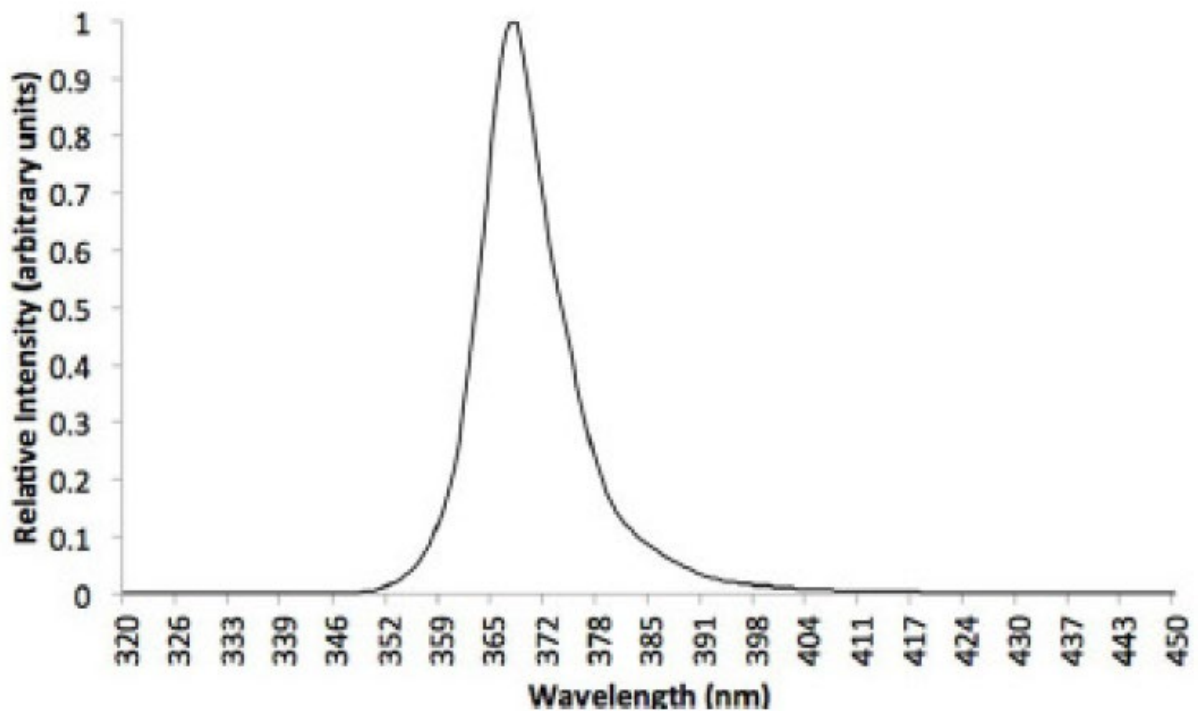
Contact your local waste management system for further information.

6. Technical Data

Due to our ongoing development, we reserve the right to change or add technical data and therefore this information is subject to change without notice.

UV LED	365 nm Led diodes with 2w per diode
UV LED life, estimated	60.000 hours
UVA light wavelength	360-370 nm
Housing type	Aluminum

UV-spectrum



7. Guarantee

This UV LED cabinet is covered by our standard 1-year warranty from the time of delivery. The warranty does not cover natural wear and tear, or damage caused by improper or careless handling and use, non-compliance with supplier rules, unsuitable equipment, and chemical, electrochemical or electrical effects, which are not expressly stated in the instructions for use.

If the customer or third party has made improper changes and repairs without the supplier's prior consent, the supplier's liability will be voided.

The warranty period for repairs performed by the supplier is 3 months from delivery, 6 months for replacements. The warranty period is extended by the duration of the repair time.

Transport damage must be reported immediately after receipt and within 48 hours after receipt.



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