

Operating Instructions

LEDLINE 500



Masthead

All rights reserved

© Copyright: Dr. Hönle AG
Lochhamer Schlag 1,
82166 Gräfelfing / Munich, Germany

Printed in Germany, March 2016

These Operating Instructions must not be reprinted or otherwise duplicated – even in part – without the express, written consent of Dr. Hönle AG.

Any kind of duplication, dissemination or storing on any form of data medium that is not authorised by Dr. Hönle AG constitutes an infringement of prevailing copyright law, and will be prosecuted. Technical alterations that serve to improve the unit described, or improve the standard of safety, are expressly reserved – even without further notice.

Publisher responsible for content: Dr. Hönle AG

Layout: Dr. Hönle AG

Table of contents

1. Description	6
1.1. Applications	6
1.2. View of the unit	7
2. Safety information	8
2.1. General notes	8
2.2. Intended use	8
2.3. Air cooling	9
2.4. Warranty and liability	9
2.5. Risk group	10
2.6. Safety label on the unit	11
2.7. Organisational measures	11
2.8. Informal safety measures	11
2.9. Duties of personnel.....	11
2.10. Dangers from Handling the Unit	12
2.11. Danger from electrical power	13
2.12. Thermal hazards.....	13
2.13. Danger from UV radiation.....	14
2.14. Danger from gases	15
2.15. Service, maintenance, remedying faults	16
3. Transport, Storage, Delivery	17
4. Setup, assembly, startup and operation	18
4.1. General	18
4.2. Startup	19
4.3. Switching the LEDLINE 500 on and off	20
4.4. Timing control	20
5. Service, Maintenance and Cleaning	22
5.1. Service.....	22
5.2. Replacing the filter mats	23
5.3. Cleaning the surface of the unit.....	24
5.4. Removing the support feet	24
6. Ordering data for units and accessories	25
6.1. Units.....	25
6.2. Accessories	25
7. Faults	26
8. Technical data	27
8.1. Dimensions and weights.....	27
8.2. Electrical data	27
8.3. Ambient conditions	27

Warnings and symbols in these Operating Instructions

These Operating Instructions describe the LEDLINE 500, its operation and possible applications. They contain safety information and information on danger points to ensure safe and correct handling of the unit.

You will find the following symbols next to all safety notes/warnings in these Operating Instructions which indicate a danger to persons. An additional signal word is used to indicate the severity of the potential injury.

Pay close attention to this information and take particular care in these circumstances to avoid accidents.

DANGER! refers to an immediate threat of danger. Failure to avoid this will result in death or serious injury. Material damage is also possible.

WARNING! refers to a potentially dangerous situation. Failure to avoid this may result in death or serious injury. Material damage is also possible.

CAUTION! refers to a potentially dangerous situation. Failure to avoid this may result in minor injuries. Material damage is also possible.

The symbols have the following meanings:



This symbol indicates a danger area



This symbol indicates a hot surface



This symbol warns of dangerous voltage



This symbol indicates UV radiation

The two symbols below appear next to information about how best to operate the unit and/or prevent damage to the unit. There is no risk of personal injury. In addition, the signal words **ATTENTION!** and **NOTE!** are also used.



ATTENTION!

This symbol and the accompanying signal word appear in the Operating Instructions in sections where particular attention should be paid in order to prevent the unit being damaged or destroyed.



NOTE!

This symbol and the accompanying signal word appear next to notes, tips on usage and useful information.

1. Description

The LEDLINE 500 is a high-intensity, mobile UV LED line lamp. Its compact design makes it easy to transport and suitable for mobile use. Its high-intensity radiation ensures reliable production results in a matter of seconds, while at the same time, the arrangement of the LEDs guarantees homogenous intensity distribution. For greater irradiation lengths, several LEDLINE 500s can be connected almost seamlessly.

The unit is available in the wavelengths 365 and 405 nm +/- 10 nm. This allows adaptation of the unit to suit the respective application.

Applications

1.1. Applications

The following are some of the possible applications of the LEDLINE 500:

- Curing of UV adhesives when joining glass, plastics and metals
- Curing of UV potting compounds on electrical and electronic components
- Production and repair of plastic parts with UV-curable polyester resin

1.2. View of the unit

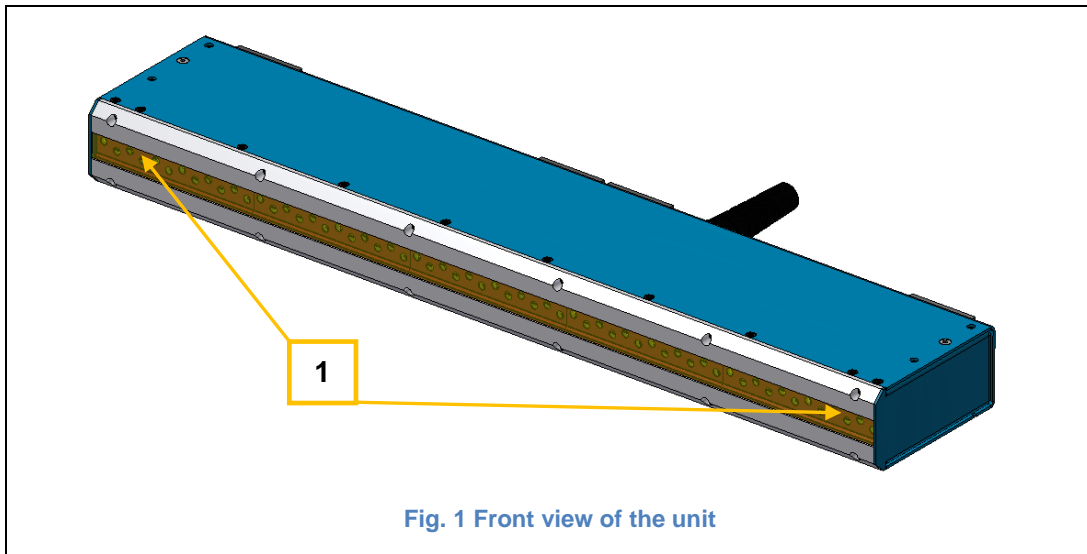


Fig. 1 Front view of the unit

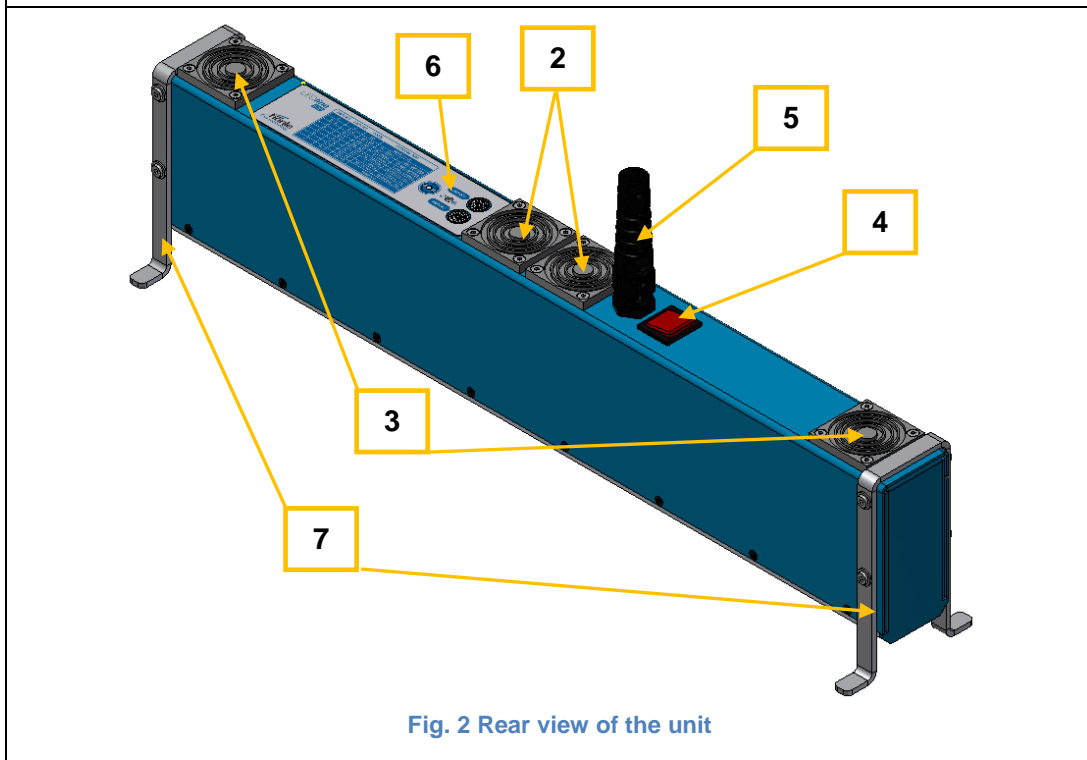


Fig. 2 Rear view of the unit

1	LED light emitting aperture with safety glass plate	5	Power cable
2	Air inlet aperture incl. filter mat	6	Timing control
3	Air outlet aperture	7	Support feet
4	ON-OFF switch		

2. Safety information

General notes

2.1. General notes

- A knowledge of all basic safety regulations is essential to ensure safe handling and fault-free operation of the LEDLINE 500.
- These Operating Instructions contain the most important notes for operating the unit in a safe manner.
- The Operating Instructions, especially the safety notes, must be observed by everyone that works with the unit.
- In addition, all rules and regulations on accident prevention that apply to the usage area must also be observed.
- The operator must check at regular intervals that the staff are working with a safety-conscious attitude.
- Under workplace health and safety regulations, operators are required to carry out a suitable and sufficient assessment of the risks arising from the use of the LEDLINE 500.
- The assessment must ensure that adequate control measurements are maintained in order to eliminate or minimise these risks. You can use the information contained in these Operating Instructions when making the risk assessment.

Intended Use

2.2. Intended use

- The LEDLINE 500 is a high-intensity, mobile UV LED line lamp for the irradiation of surfaces (see also section Applications, p. 6).
- Any other use or use above and beyond these terms is defined as inappropriate and is thus dangerous.
- The LEDLINE 500 must not be used for medical or therapeutic purposes, for skin-tanning or in any other medical equipment.
- The operator may only operate the equipment as stipulated by the operating instructions in this manual.
- The user undertakes to adhere strictly to the prescribed schedule for servicing and maintenance work.

The following are further conditions for appropriate use:

- observance of all notes in these Operating Instructions,
- the execution of all servicing and maintenance work
- compliance with all general and specific safety instructions in these Operating Instructions,
- compliance with the relevant accident prevention regulations.

**NOTE!**

Dr. Höhle AG accepts no liability for damage which occurs due to improper use of the unit.

2.3. Air cooling

The LEDLINE 500 is an air-cooled UV irradiation unit. The installation location must be such that adequate ventilation and extraction are ensured.

Air cooling

The following ambient conditions must be complied with for operation:

- no conductive dusts in the atmosphere
- no corrosive atmospheres; in particular, the atmosphere must not contain chlorine, sulphur, acid or salt
- clean, dust-free atmosphere

Under no circumstances may the air inlet and outlet apertures be closed off or blocked. Make sure that the air can circulate freely.

Blocked air apertures can lead to malfunctions or even destruction of the unit.

Comply with the prescribed ambient conditions for operation described in chapter 8.3 p. 27.

2.4. Warranty and liability*Warranty and liability*

The "General Conditions of Sale and Delivery" of Dr. Höhle AG apply in all cases. They are available to the user upon signing the contract, at the latest. No warranty or liability claims may be made in the event of injury to persons or damage to property if this has arisen from one or more of the following:

- improper use of the LEDLINE 500,
- incorrect assembly, startup and operation of the LEDLINE 500,
- operation of the LEDLINE 500 with defective and/or inoperable safety and protective equipment,
- failure to observe the information in the Operating Instructions regarding the safety, transport, storage, assembly, startup, operation and servicing of the unit,
- unauthorised structural modifications to the LEDLINE 500,

- inadequate monitoring of unit components which are subject to wear,
- incorrectly performed repairs,
- catastrophes, the effect of foreign bodies or force majeure.

Risk group

2.5. Risk group



DANGER!

Improper use may endanger the health of the user or third parties.
UV radiation can cause serious skin or eye damage!
Wear corresponding protective equipment!

The LEDLINE 500 falls under the scope of standard DIN EN 62471:2008 ("Photobiological safety of lamps and lamp systems").

It is classified as belonging to Risk Group 2, which requires special safety measures to be observed during its operation.

For more detailed information, please see the DIN EN standard referred to above.

The unit is labelled with the corresponding classification and risk group.

However, in specific installation situations, e.g. with corresponding housings or if the unit is used at a distance >200 mm, the risk group may be significantly lower.

As for all equipment falling under the scope of DIN EN 62471:2008, the operator must carry out corresponding classification in accordance with the standard for each individual use.

2.6. Safety label on the unit

On the housing of the LEDLINE 500, there is a UV warning label (see illustration below). If this label is concealed or not visible to the user for some other reason, the operator is responsible for ensuring that a suitable safety notice is posted in the work area.



Fig. 3 UV warning sign

Safety label on the unit

2.7. Organisational measures

The functions of all the existing safety equipment must be inspected regularly before the start of work or of each new shift. Look for outwardly visible damage.

Organisational Measures

2.8. Informal safety measures

In addition to this user's manual, the generally and locally applicable accident prevention and environmental protection regulations must be made available and observed.

Informal safety measures

2.9. Duties of personnel

Persons who are assigned the task of working on and with the LEDLINE 500 undertake to do the following before starting work:

- to observe the occupational safety and accident prevention regulations
- to read the chapter on safety and the warnings printed in this manual and to observe them at all times while using the equipment.
- In particular, the safety measures in DIN EN 62471: 2008 ("Photobiological safety of lamps and lamp systems") must be observed.

Obligation of personnel

2.10. Dangers from Handling the Unit

The LEDLINE 500 is constructed in accordance with the technological state of the art and generally accepted safety engineering practice.

Nevertheless, certain hazards may arise when handling the unit, for example:

- Danger from electrical current
- Danger from UV radiation
- Thermal hazards

The equipment may only be used under the following conditions:

- The unit must always be set up in such a manner that the user or other persons cannot be exposed to direct radiation.
- In order to protect against indirect scattered radiation, if necessary (in case of strongly reflective surfaces) personal protective equipment must be worn to protect the eyes and skin.
- All points in the chapter on intended use must be complied with.
- With regard to safety, the device is in flawless condition



DANGER!

Improper use may endanger the health of the user or third parties (severe skin or eye damage)!

It may also cause damage to the device or other material damage.



WARNING!

The radiation source of the LEDLINE 500 emits UV radiation. See also Danger from UV radiation p. 14.

2.11. Danger from electrical power

Danger from electrical power

The electrical equipment of the LEDLINE 500 must be inspected regularly.

Inspection before starting work:

- Check all components of the unit for outwardly visible damage
- Check that all electric cables are in flawless condition

Loose cable connections must be repaired immediately, and damaged cables must be replaced.



DANGER!

Danger of fatal electric shocks!

There is danger of direct or indirect contact with electricity!
Always pull the plug and disconnect the unit from the mains before starting work on it.



WARNING!

The LEDLINE 500 may only be connected to properly installed power sockets with a protective ground conductor. Furthermore, the LEDLINE 500 may only be operated with the power network voltage specified in the technical data.

2.12. Thermal hazards

Thermal hazards

The following safety precautions must be observed when operating the LEDLINE 500:

- Never touch the safety glass plate when operating the unit.
- The LEDLINE 500 can reach a temperature of up to 60°C during operation. There is a risk of burns. It must be ensured that the units cannot be touched at the corresponding points.
- The LED light-emitting surface may not be directly covered.
- There must be a safe surface available on which to place the switched-on lamp. The LEDLINE 500 is raised on support feet to prevent destruction of the safety glass plate caused by heat build-up. However, it must never be placed on a temperature-sensitive or combustible surface.
- The radiation can lead to heating-up of the irradiated surface, in particular in the case of dark surfaces.
There is a risk of burns.
- Under no circumstances may the unit be operated in the vicinity of flammable or explosive materials, gases or liquids. There is an acute risk of fire and explosion. There must be a distance of at least 1m between the unit and flammable objects.

**DANGER!**

It is forbidden to operate the device in the immediate vicinity of flammable objects, liquids or gases.

There is a risk of fire and explosion.

**WARNING!**

The LEDLINE 500 emits high-intensity radiation. There is a danger of both fire and burns. Wear corresponding protective equipment.

*Danger from
UV Irradiation*

2.13. Danger from UV radiation

The radiation source of the LEDLINE 500 emits UVA radiation and visible light.

**WARNING!**

If improperly handled, UV radiation can damage skin and eyes! It can lead to severe sunburn, premature ageing of the skin, inflammation of the retina and conjunctiva, and possibly to skin cancer.

Wear corresponding personal protective equipment.

The instructions below must be observed when working with the unit:

- The LEDLINE 500 must always be held or installed in such a manner that neither the user nor other persons are exposed to direct radiation.
- In the case of workplaces where manual work is performed or in mobile applications, the working area must be enclosed in an appropriate manner.
- UV-absorbent plastics or metal plates may be used for screening.
- Depending on the surface of the objects to be irradiated, personal protective equipment must be worn if necessary to protect the eyes and skin against indirect radiation.
- Protective goggles should comply with standard EN 170 (max. spectral transmittance (313 nm) 0.0003%, (365 nm) 0.3 %) and offer protection against radiation both directly and from the side
- Gloves to protect hands should have a Clothing Protection Factor (CPF) of 30+ this is equivalent to the sun protection factor quoted for sunscreens. The CPF corresponds to the protection factor offered by sun creams.
- UV radiation accelerates the ageing of materials. Consequently, any protective equipment that is damaged or exhibits signs of ageing must be replaced.
- Never look directly into the lamp when it is switched on.
- The LEDLINE 500 must never be operated without the safety glass plate or with a damaged safety glass plate.



CAUTION!

UV radiation accelerates the ageing of materials. UV-sensitive objects and surfaces must therefore be protected from radiation.



CAUTION!

UV radiation can cause material damage to electronic components. When processing, for example, EPROMs in the vicinity of the LEDLINE 500, they must be protected against UV radiation.



NOTE!

Protective equipment is listed in the chapter "Ordering data for units, replacement parts and accessories" on page 25

2.14. Danger from gases

Under certain circumstances, chemical vapours may be released when irradiating materials with the LEDLINE 500.

- The safety data sheets for the materials being irradiated must be observed.
- Also observe the rules on harmful substances in the workplace.
- Upon beginning operation, the air contamination of the work-
- space is to be measured. In the event of increased air contamination, it is necessary to set up an air extraction and exhaust system.
- If necessary, respiratory protection must be worn.
- The most commonly used UV-curable adhesives do not emit vapours when irradiated with the LEDLINE 500.

Danger from gases

2.15. Service, maintenance, remedying faults

All necessary maintenance tasks are described in the chapter "Service, Maintenance and Cleaning". Carrying out these tasks ensures reliable operation.

If faults occur in the LEDLINE 500, the chapter "Faults" provides information on the causes of faults and possible remedial action.

If a fault which cannot be remedied using these instructions arises on the unit, contact the Hönle customer service.

Parts that are not in flawless condition must be exchanged immediately.

Use only original replacement and wear parts.

There is no guarantee that parts from other manufacturers are designed and manufactured to meet the required standards of robustness and safety.

No changes, additions or conversions may be made to the LEDLINE 500 without the permission of Dr. Hönle AG.

Contact address for claims under warranty, repair and replacement part service:

Dr. Hönle AG
UV-Technologie
Lochhamer Schlag 1
D-82166 Gräfelfing / Munich, Germany

Phone: +49 (0)89 / 856 08-0

Fax: +49 (0)89 / 856 08-148

E-Mail: uv@hoenle.com

Website: www.hoenle.de



WARNING!

No repairs or changes may be made to the unit other than those described in these Operating Instructions.

3. Transport, Storage, Delivery

*Transport,
Storage, Deliv-
ery*

Scope of delivery:

- LEDLINE 500 (with support feet)
- Protective goggles
- Protective gloves
- Operating Instructions

The delivered parts must be inspected for completeness and damage or other issues.

Any damage that has been ascertained must be documented at once, and reported to the dealer or to Dr. Hönle AG without delay.



NOTE!

Please dispose of the packaging material in an environmentally responsible manner.

It may be possible to reuse it.

It is recommended to keep the packaging material, in case the unit has to be sent by post or otherwise transported.

4. Setup, assembly, startup and operation

4.1. General

- When setting up the unit, make sure that there are no fingerprints on the safety glass plate.
 - The reflector and the LEDs may under no circumstances be touched or allowed to come into contact with other objects. Otherwise this would immediately destroy the delicate LED surface.
 - If necessary, clean the safety glass plate when it is cold using a clean cloth and isopropanol. Ensure adequate ventilation during cleaning.
 - Before switching on, check the supply air and discharge air openings in the housing. The openings must not be covered or blocked by any foreign bodies.
 - The installation location must be such that adequate ventilation and extraction are ensured.
The atmosphere must not contain conductive dusts or corrosive media.
 - Protect the LEDLINE 500 against chemical vapours and solvents.
 - Only operate the LEDLINE 500 in dry rooms. Max. rel. humidity 70 %; non-condensing. Open-air operation is not permitted.
 - Never place the switched-on unit on a temperature-sensitive or combustible surface with the safety glass plate facing downwards.
 - The support feet of the LEDLINE 500 may only be removed if the installation situation is such that heat build-up at the safety glass plate is prevented.
 - The LED light-emitting surface may not be directly covered.
- ⇒ This prevents a heat build-up which may lead to destruction of the safety glass plate and the LEDs.

**WARNING!**

When operating the LEDLINE 500, make sure that there is sufficient cooling. There is acute danger of fire if the equipment is not sufficiently cooled!

Neither the ambient temperature nor the cooling air temperature may exceed 35 °C.

4.2. Startup

- Insert the mains power plug into the power socket and position the LEDLINE 500 so that it is pointing away from your body before switching it on.
- Also check the vicinity to ensure that there are no other persons nearby.
- Switch the LEDLINE 500 on at the ON-OFF switch (4).
Alternatively, set the irradiation time at the timing control (see chap. 4.4 p. 20).

It must be ensured at all times that no-one can be exposed to direct radiation from the LEDLINE 500. In addition, the safety information in this Operating Manual must be read and strictly observed.



DANGER!

When the LEDLINE 500 has been switched on, it emits high-intensity UV radiation. **In case of improper handling**, this can damage skin and eyes! It can lead to severe sunburn, premature ageing of the skin, inflammation of the retina and conjunctiva, and possibly to skin cancer.

Wear corresponding protective equipment.



WARNING!

The LEDLINE 500 may only be connected to properly installed power sockets with a protective ground conductor. Furthermore, the LEDLINE 500 may only be operated with the power network voltage specified in the technical data.

Switching the LEDLINE 500 on and off

4.3. Switching the LEDLINE 500 on and off

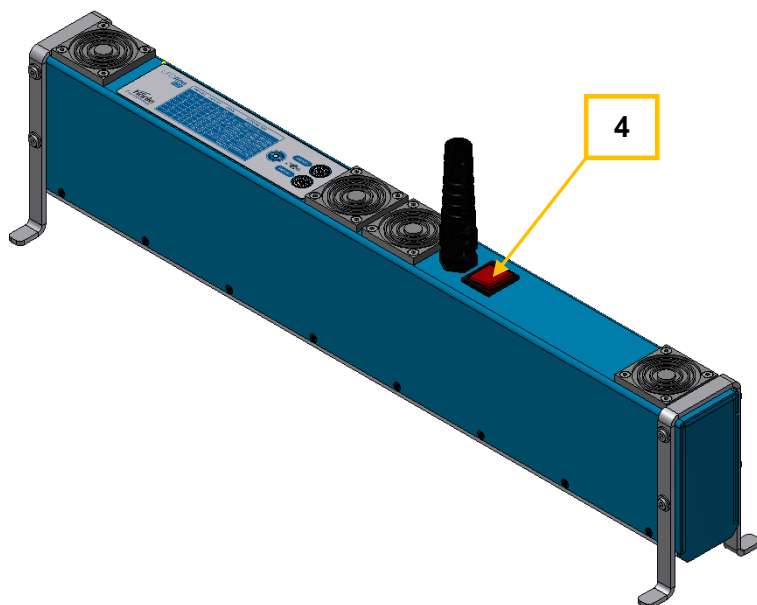


Fig. 4 Rear view of the unit

Switch the LEDLINE 500 on and off at the ON-OFF switch (4).

Timing control

4.4. Timing control

The operator can adjust the irradiation time of the LEDLINE 500 individually to suit the specific application.

To do this, the time intervals can be set by adjusting the rotary switches SWITCH1 (9) and SWITCH2 (10) with the respective codings.

(See Table 1 p. 21)

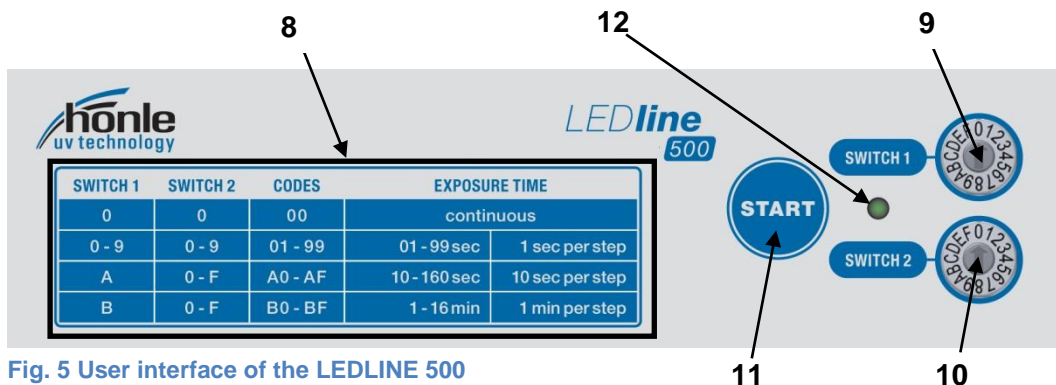


Fig. 5 User interface of the LEDLINE 500

Number	Explanation
8	Coding for the timing control
9	Rotary switch SWITCH1
10	Rotary switch SWITCH2
11	Push switch used to start the LEDLINE 500
12	Status LED

Table 1 Coding for the irradiation time

SWITCH1	SWITCH2	CODING	IRRADIATION TIME	
0	0	00	Continuous operation	
0 – 9	0 – 9	01 – 99	01 – 99 s	1 second per step
A	0 – F	A0 – AF	10 – 160 s	10 seconds per step
B	0 – F	B0 – BF	1 – 16 min	1 minute per step
C	0 – F	C0 – CF	10 – 160 min	10 minutes per step
D	0 – F	D0 – DF	1 – 16 h	1 hour per step
E	reserved for special application			
F	reserved for special application			

Setting the irradiation time:

1. Switch the LEDLINE 500 off at the main switch (4).
2. Turn the rotary switch of SWITCH1 (9) to the desired position.
3. Repeat the process for SWITCH2 (10).
4. Switch the LEDLINE 500 on at the main switch (4).
5. Press START (11) to start the set irradiation cycle.
 - ⇒ The LEDLINE 500 switches off again automatically after the set time.
6. Repeat step 4 for each further irradiation process with the currently set irradiation time.
 - ⇒ To change the irradiation time, repeat steps 1 and 2.

5. Service, Maintenance and Cleaning

Service, repair and cleaning work may only be performed by authorised personnel.



DANGER!

Danger of fatal electric shocks!
There is danger of direct or indirect contact with electricity!
Always pull the plug and disconnect the unit from the mains before starting work on it.



WARNING!

The LEDLINE 500 emits high-intensity radiation. There is a danger of both fire and burns. Wear corresponding protective equipment.
Allow the unit to cool down for at least 5 min.

In general, work should be performed with a clean, lint-free cloth or clean gloves. Only touch the LEDLINE 500 by its metal housing.



ATTENTION!

When performing servicing, maintenance and cleaning work on the unit, it must be ensured that the light outlet aperture is not soiled by fingerprints or other contaminants.
Contamination reduces the UV yield of the LEDLINE 500.

5.1. Service

Service

The following servicing tasks must be carried out on the LEDLINE 500:

Daily:

- Inspect the LEDLINE 500 for damage and soiling of the LED light outlet aperture.
- Check the light inlet and light outlet apertures for contamination.
- Check the safety glass plate for contamination.

If necessary, clean the safety glass plate of the LED outlet aperture. Clean the safety glass plate when it is cold, using a clean cloth and isopropanol.

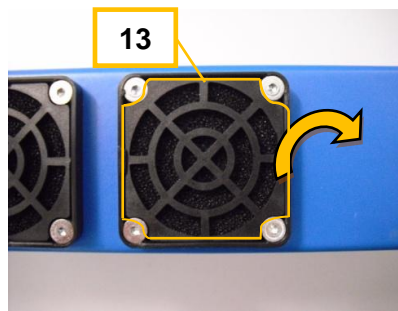
At regular intervals (depending on operating conditions):

- Inspect the filter mats for soiling and clean if necessary.
- Depending on the ambient conditions, the filter mats should be replaced as required or after approx. 500 operating hours.

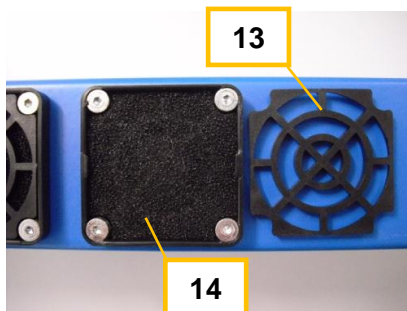
5.2. Replacing the filter mats

Replacing
the filter

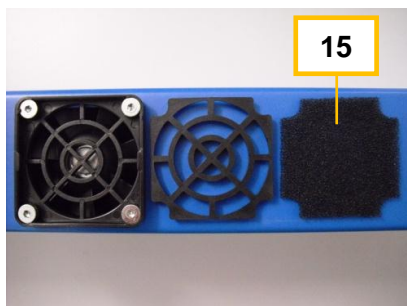
1. Switch the LEDLINE 500 off (On-OFF switch (4) in position 0) and pull the plug to disconnect it from the mains.
2. Allow the unit to cool down for at least 5 minutes before working on it.



3. Remove the fan screen (13). It is not screwed on.



4. Remove filter mat (14).



5. Clean the filter mat and reinsert it or insert a new filter mat (15).
6. Replace the fan screen (13) and press it firmly into position.

Cleaning the surface

5.3. Cleaning the surface of the unit

Do not use any harsh or abrasive cleaning agents to clean the surface of the unit.

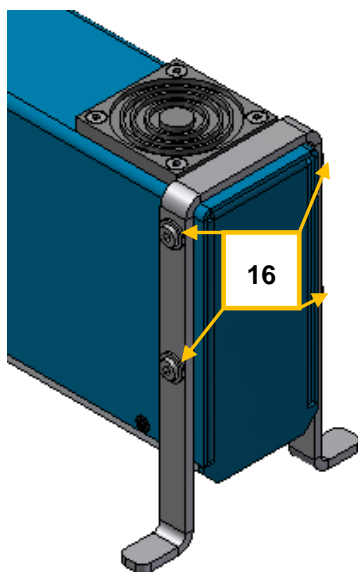
Use only mild cleaning agents containing tensides, cleaning cloths or a slightly moistened sponge. Do not allow moisture to penetrate the unit under any circumstances.

Removing the support feet

5.4. Removing the support feet

During mobile application of the LEDLINE 500, the support feet ensure clearance under the unit in order to prevent heat build-up.

For stationary application of the LEDLINE 500, the support feet can be removed.



1. Switch the unit off and pull the mains power plug.
2. Release the 4 screws (hexagon socket M4) on each support foot.
3. Remove the support foot.
4. Repeat the process for the second support foot.

6. Ordering data for units and accessories

Ordering data

Accessories and replacement parts can be ordered from our replacement parts service at the following address:

Dr. Hönle AG
 UV-Technologie
 Lochhamer Schlag 1
 D-82166 Gräfelfing / Munich, Germany

Phone: +49 (0)89 / 856 08-0
 Fax: +49 (0)89 / 856 08-148

6.1. Units

Units

Designation	Article/Order number
LEDLINE 500, 365 nm	76250
LEDLINE 500, 365 nm (US version)	76251
LEDLINE 500, 405 nm	74500
LEDLINE 500, 405 nm (US version)	76252

6.2. Accessories

Accessories

Designation	Article/Order number
Protective goggles, tinted (for 405 nm)	0067
Protective goggles, clear glass (for 365 nm)	0068
Protective gloves	19754

7. Faults

The fault list below contains information on faults which may occur on the LEDLINE 500, their causes and remedial action.

Should a fault occur in the unit that cannot be rectified using these instructions, Dr. Höhle AG Customer Service must be contacted.

Contact address:

Dr. Höhle AG

UV-Technologie
Lochhamer Schlag 1
D-82166 Gräfelfing / Munich, Germany

Phone: +49 (0)89 / 856 08-0

Fax: +49 (0)89 / 856 08-148

Fault	Cause of fault	Remedial action
LEDs do not light up.	Unit is not switched on.	<ul style="list-style-type: none"> Switch the unit on.
	Mains power plug is not plugged in.	<ul style="list-style-type: none"> Plug in the mains power plug.
	No voltage at mains power socket.	<ul style="list-style-type: none"> Check the main fuse.
Housing becomes too hot and unit switches off.	Fan is not running.	<ul style="list-style-type: none"> Switch the unit off immediately and send it to customer service.
	Fan apertures blocked by foreign bodies or covered.	<ul style="list-style-type: none"> Remove foreign body or cover. Clean or replace filter mat.

Colour coding of status LED

Status LED	Meaning	
OFF	Unit is switched off	
Green	Unit is switched on and ready for operation.	
Blue	LED lights up.	
Red permanent or flashing light	Fault	
Blue / red flashing light	Prewarning, temperature	Fan apertures blocked by foreign bodies or covered

8. Technical data

8.1. Dimensions and weights

Dimensions and weights

	Width	Depth	Height	Weight
LEDLINE 500	503	46	101	approx. 2.8 kg

8.2. Electrical data

Electrical data

Supply voltage	90- 264 V
Permissible mains voltage fluctuations	+ - 10 %
Mains frequency	47 Hz – 63 Hz
Intensity*	365 nm: 130 mW/cm ² 405 nm: 300 mW/cm ²
Radiation output surface	approx. 500 x 15 mm
Power consumption	150 W
Maximum back-up fuse	16 A

*) measured with Hönle UV-Meter and LED surface sensor at a distance of 20 mm

8.3. Ambient conditions

Ambient conditions

Installation location	Only in closed rooms
Atmosphere	Without conductive dusts and no corrosive atmospheres; in particular, the atmosphere must not contain chlorine, sulphur, acid or salt.
Temperature range	+5 °C to +35 °C
Air humidity	Maximum relative humidity 70 % (non-condensing)
Typical LED service life	> 10000 hours



Dr. Hönle AG
UV-Technology
Lochamer Schlag 1
82166 Gräfelfing, Munich,
Germany
Phone: +49 (0)89 / 856 08-0