# eurolite WLF-2500

Water Low Fog PRO



# Bedienungsanleitung User Manual

# eurolite®

WLF-2500 Water Low Fog PRO

Extrem leistungsstarker Bodennebler im Case mit Ultraschalltechnik High-output floor fogger in a case with ultrasonic technology





No. 51702062

www.eurolite.de

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D00131353, version 1.1, publ. 11/08/2022

For product updates, documentation, software and support please visit www.eurolite.de. You can find the latest version of this user manual in the product's download section.

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# INTRODUCTION

# **Experience Eurolite.**

Product videos, suitable accessories, firmware and software updates, documentation and the latest news about the brand. You will find this and much more on our website. You are also welcome to visit our YouTube channel and find us on Facebook.



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www.youtube.com/ eurolitevideo



www.facebook.com/ Eurolitefans Welcome to Eurolite! Thank you for choosing one of our products. Eurolite is your connection to the world of show with an unparalleled variety of products, both for professionals and beginners.

If you follow the instructions given in this manual, we are sure that you will enjoy this product for a long period of time. This user manual will show you how to install, set up and operate your new Eurolite product.

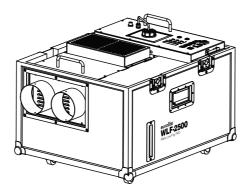
Users of this product are recommended to carefully read all warnings in order to protect yourself and others from damage. Please keep this manual for future needs and pass it on to further owners.

#### **Product features**

- · Creates enormous amounts of low lying fog
- Environmentally friendly, cost-saving and easy to use
- Designed for stage and theater productions, film sets as well as large clubs and discotheques
- · Uses tap water and regular fog fluid
- · Does not require harmful CO2 or dry ice
- The water is atomized by ultrasound and mixed with the fog particles
- Ultrasonic atomizer can be switched off for standard fog machine operation
- Solid flightcase with swivel wheels
- 2 flexible fog hoses with quick connectors
- Effective fog fluid shortage protection circuit
- · Spacious water and fluid tank
- Operation via DMX or on-board LCD panel
- · Wireless remote control included
- Continuous output possible
- · Adjustable timer with interval, duration and fog volume
- Short warm-up time
- Very low fluid consumption rate
- · Drain device for easy emptying and cleaning
- Removable containers and water level indicator
- For the best effect please use Eurolite DSA fog fluid

## **Package contents**

- WLF-2500 ground fog machine
- Power cord
- · Hoses and adapters
- · Wireless remote control
- · these instructions



# **IMPORTANT SAFETY INSTRUCTIONS**

## **WARNING!**



Please read the safety warnings carefully and only use the product as described in this manual to avoid accidental injury or damage.

## Intended use

- This fog machine uses ultrasonic technology to atomize tap water and mix it with vaporizied fog fluid. It generates a find ground mist without the need for harmful CO2 or dry ice as a cooling component. Therefore the operating costs are low and the machine is environmentally friendly and safe to use. This device is designed for professional use in the field of event technology, e.g. on stage.
- Only use the device according to the instructions given herein. Damages due to failure to follow these operating instructions will void the warranty! We do not assume any liability for any resulting damage.
- We do not assume any liability for material and personal damage caused by improper use or non-compliance with the safety instructions. In such cases, the warranty/guarantee will be null and void.
- Unauthorized rebuilds or modifications of the device are not permitted for reasons of safety and render the warranty invalid.

# Danger due to electricity

- The device is suitable for indoor use only. Do not use it outdoors. Never expose it to rain or moisture. Do not store it in rooms exposed to moisture.
- To reduce the risk of electric shock, do not open any part of the device. There are no serviceable parts inside the device.
- Only connect the device to a properly installed mains outlet. The outlet must be protected by residual current breaker (RCD). The voltage and frequency must exactly be the same as stated on the device. If the mains cable is equipped with an earthing contact, then it must be connected to an outlet with a protective ground. Never defeat the protective ground of a mains cable. Failure to do so could result in damage to the device and possibly injure the user.
- The mains outlet must be easily accessible so that you can unplug the device quickly if need be.
- Never touch the mains plug with wet or damp hands. There is the risk of potentially fatal electric shock.
- The mains cable must not be bent or squeezed. Keep it away from hot surfaces or sharp edges.
- Never pull the mains cable to disconnect the mains plug from the mains outlet, always seize the plug.
- Unplug the device during lighting storms, when unused for long periods of time or before cleaning.
- Do not expose the device to any high temperatures, direct sunlight, dripping or splashing water, strong vibrations or heavy mechanical stress.
- Do not place any objects filled with liquids on the device.
- Do not place any open sources of fire, such as burning candles, on or directly next to the device.
- Make sure that objects cannot fall into the device, in particular metal parts.
- Only have repairs to the device or its mains cable carried out by qualified service personnel. Repairs are required when the device or the mains cable is visibly damaged, liquid has been spilled or objects have fallen into the device; when the device has been exposed to rain or moisture, has been dropped or malfunctions occur.
- Cleaning of the device is limited to the surface. Make sure that moisture does not come into contact with any areas of the terminal connections or mains voltage control parts. Only wipe off the product with a soft lint-free and moistened cloth. Never use solvents or aggressive detergents.

# Danger to children and people with restricted abilities

- This product is not a toy. Keep it out of the reach of children and pets. Do not leave packaging material lying around carelessly. Never leave this device running unattended.
- This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

# Warning - risk of injuries

- Never drink fluid or use it on the inside or outside of a human body. If fluid gets in contact with skin or eyes, rinse thoroughly with water. If it is necessary call a doctor immediately.
- Danger of explosion! Never add flammable liquids of any kind to the fog liquid.
- Never aim the output nozzle directly at people or at open flames. Never aim the smoke at yourself, people or animals.
- Never aim the smoke at power sockets or other objects that are powered by electrical current. You could damage them or even expose yourself to hazardous electric shocks.
- Never aim the smoke at the device itself or at surfaces that are not heat resistant. Avoid direct skin contact with the smoke. Inappropriate use may cause burns due to high temperatures.
- DANGER OF BURNING! Keep minimum distance of 50 cm to nozzle! Keep device upright.
- DANGER OF CRUSHING! Please be careful when opening and closing the lid!
- Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
- When the fog machine is not in use for a longer period of time empty the entire fluid from the machine before storing it.
- Before filling the device disconnect from mains. Never fill in any hot liquids. Only use high-quality, water-based smoke fluid recommended by the manufacturer. Other smoke fluids may cause clogging. Always make sure there is sufficient smoke fluid in the fluid tank. Operating this smoke machine without smoke fluid will cause damage to the pump as well as over-heating of the heater.
- For commercial use the country-specific accident prevention regulations of the government safety organization for electrical facilities must be complied with at all times.

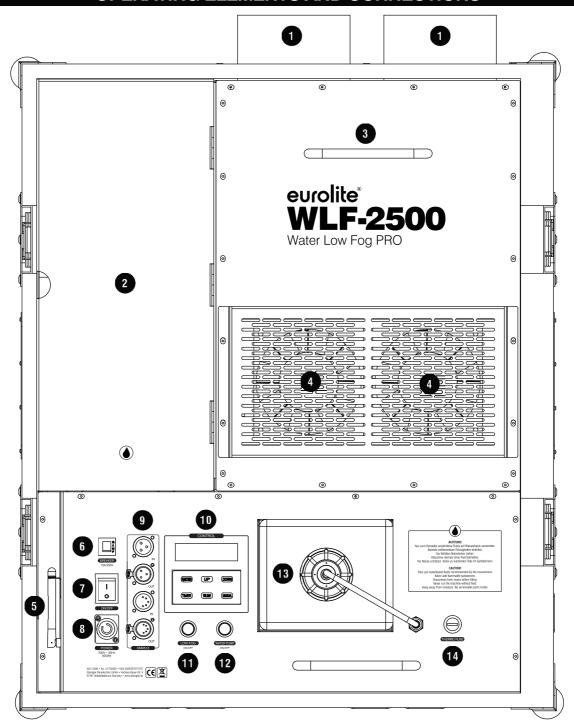
# Caution - material damage

- Always make sure there is sufficient smoke fluid in the fluid tank. Operating this smoke machine without smoke fluid will cause damage to the pump as well as over-heating of the heater.
- Fill the water tanks exclusively with water.
- Secure the device against unintentional rolling away.
- After operating the fog machine, the fog fluid ways must be flushed with distilled water. When fog fluid remains in the system and the fog machine is not operated, the fluid may lead to irreversible damages! This will make the guarantee void.
- If the device has been exposed to drastic temperature fluctuation, do not switch it on immediately. The resulting condensation may destroy the device. Allow the device to reach room temperature before connecting it. Wait until the condensation has evaporated.
- Always store the device dry! Always drain the tank and please use the original packaging if the device is to be transported.
- If a serial number label is affixed to the device, do not remove the label as this would make the guarantee void.
- The operation of the device can lead to an increase in room humidity and thus possibly damage devices that are sensitive to high humidity.

#### **About batteries**

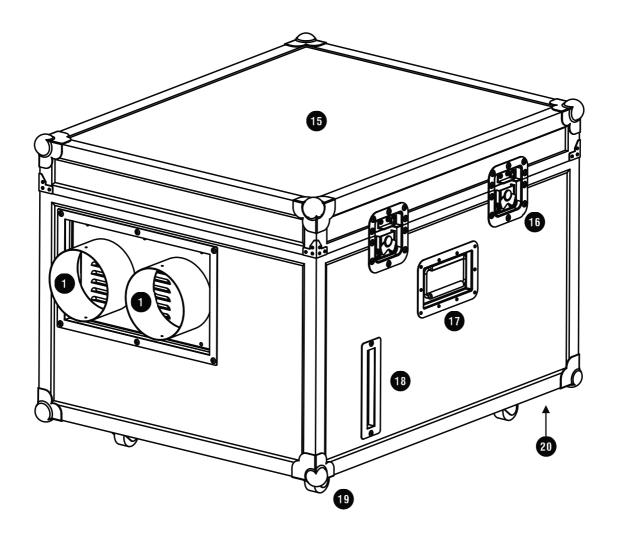
- Do not try to short-circuit, recharge, disassemble or heat batteries (danger of explosion!).
- Remove the batteries if the device is not used for a longer period of time.
- Damaged/leaking batteries may cause harm to your skin-use safety gloves.

# **OPERATING ELEMENTS AND CONNECTIONS**



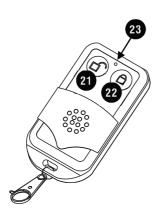
- Output nozzles
- 2 Cover water tank 1
- 3 Cover water tank 2/Ultrasonic atomizer
- 4 Fans
- **5** Antenna for the wireless remote
- 6 Circuit breaker
- Power on/off

- 8 Power input
- **9** 3- and 5-pin DMX connectors
- Display and operating buttons
- **1** Low fog on/off
- Water pump on/off
- 13 Fog fluid tank
- 14 Thermal safety switch



- 16 Removable lid
- 16 Butterfly lock
- Handle

- Water level indication
- Castors
- 20 Drain valve (bottom)



- Fog output on
- Fog output off
- 23 Control indicator

# **SETUP**

# Placing the unit

- 1 Remove all packing materials from the shipping box. Make sure that there are no packing remnants at the fog output nozzles.
- 2 Make sure that the scope of delivery is complete and that the device is not damaged.
- 3 Place the machine on a level surface and fix the castors with the brakes.
- 4 Loosen the butterfly locks and remove the lid.
- 5 Fasten the fog hoses to the outlet nozzles of the machine using the quick connectors. Position the end of the hoses in the hose guides.

#### **Notes**

- Do not place the device where there is a slope or incline.
- Install the device in a well-ventilated area. The operation in an insufficiently ventilated room can lead to a condensation of the fog fluid. The resulting slippery surface can cause accidents.
- The operation of the device can lead to an increase in room humidity and thus possibly damage devices that are sensitive to high humidity.
- Keep a minimum distance of 20 cm around and above the device.
- Do not orientate the output nozzle directly in the direction of the audience's eyes. In order to create a good effect, there should be a distance between the device and the audience of at least 1.5 m.
- All fog machines develop condensation around the output nozzle. Because this may result in some moisture accumulation on the surface below the output nozzle, consider this condensation when installing your unit.

# Filling up water and fog fluid



## Fluid handling

Always disconnect from the mains before filling the machine. Only use water-based fluids. We recommend high-quality Eurolite fluids. Never add flammable liquids. If fluid gets inside the machine, have it checked by skilled personnel before it is operated.

Fill the large water tank no. 1 with tap water. The water tank capacity is 18 liters. Please fill only water and no other substances into this tank. The water quantity can be checked visually with the filling level indicator on the side during operation. It is not necessary to fill the small water tank no. 2, because the water is automatically pumped from tank 1 into this tank.

**WARNING!** 

2 Fill fog fluid into the fluid tank. The best effect is achieved with the Eurolite fluid listed in the accessories section. To avoid contamination of the fog liquid, you should always replace the cap on the liquid container immediately after filling. Make sure that there is always sufficient fluid in the tank.

**CAUTION!** 

3 Make sure that the inlet hoses are securely attached and not kinked.

# Switching on



# **Operating conditions**

Operation with empty water and fluid containers can lead to overheating and permanent damage of the pump. When operating, always ensure that there is sufficient fog fluid and water in the liquid containers to avoid no-load running.

- 1 Connect the device to the mains and switch it on. The machine starts to heat up and the display shows "Warming up".
- 2 Activate the pump by briefly pressing the **WATER PUMP** button (button illuminates). The pumping process is started and a humming sound is heard. The pumping process is automatically controlled and completed after about 3 minutes.
- The heat-up process also takes about 3 minutes. As soon as it is finished, the display shows "**Ready To Fog**". After that the machine is ready to emit fog.
  - Note: Additionally, a "W" for wireless and an "S" for fluid sensor is indicated if these functions are activated.
- 4 Make the necessary menu settings with the buttons on the control panel or press and hold the **MANUAL** button to activate the fog output immediately.

# **OPERATING MODE SELECTION**

The **LOW FOG** button controls the ultrasonic atomizer. Press the button to switch on the atomizer (button lights up). The machine then uses water as the primary consumable and mixes it with fog fluid. This creates a fine mist that stays on the floor for a long time without rising in the room.

Release the button to switch off the atomizer. The machine now works as a conventional vaporizer fog machine based on fog fluid and produces a dense fog that rises in the room.

# **MENU SETTINGS**

Operation is via the display and the control buttons. Alternatively, the machine can be controlled via wireless remote control or a DMX controller. DMX control has priority over the menu settings and the remote control.

# **Operating buttons**

Button	Function	
FUNCTION	Selecting menu items	
UP	Setting values and options	
DOWN	Setting values and options	
TIMER	Timer mode activation	
VOLUME	Continuous mode activation	
MANUAL	Manual mode activation	

#### Menu structure

Mode	Display		Function
Initiation	Welcome		This screen appears as a greeting after switching on.
Warm up phase	Warming Up		The machine is warming up and not ready for use before the required operating temperature has been reached.
Home screen	Ready To Fog		The warming up phase has been completed and the device is now ready for use.
Operation settings	Interval Set	1-200s	Adjust time interval under timer mode
	Duration Set	1-200s	Adjust duration under timer mode
	Timer Out	1-100%	Adjust fog output volume under timer mode
	Volume Out	1-100%	Adjust fog output volume under continuous mode
DMX settings	DMX512 Add.	001-512	Set DMX starting address
Wireless remote	Wireless	on/off	Activate/deactivate wireless remote control
Fluid sensor	Fluid Sensor	on/off	Activate/deactivate fluid sensor

# TIMER OPERATION

In the timer mode, the fog machine will automatically emit fog. The time intervals, duration and fog volume depend on the corresponding menu settings. Press the **TIMER** button, to activate the timer mode. The display indicates the set time interval. The unit counts down to 0 seconds and emits fog. To deactivate the timer mode, press the **TIMER** button again.

# **CONTINOUS OPERATION**

Press the **VOLUME** button, to activate continuous fog output. The display indicates "**Volume**" followed by the value that was set in menu item "**Volume Out**". To stop the fog output, press the **VOLUME** button once again.

# **MANUAL OPERATION**

For immediate fog output at the maximum volume of fog, keep the **MANUAL** button pressed. The display indicates "**Manual Output**". As soon as you release the button, the fog output will stop. The manual operation will take priority over the continuous operation and the timer operation. Even if one of these operating modes is activated, the fog machine will always emit the maximum volume of fog when the **MANUAL** button is pressed.

# **WIRELESS REMOTE CONTROL**



- 1 Put the receiving antenna in a vertical position on the machine.
- Press the **left** button on the remote control to emit fog (continuous operation with 100 % fog volume). The **control LED** between the two buttons lights up.
- 3 To stop the fog output, press the **right** button.
- 4 If necessary, the wireless remote control can be turned off in the menu (**option Wireless**). If it's activated, a "**W**" for wireless is indicated in the display.
- If the remote control is not working properly, it must be assigned to the unit. The remote control can be assigned during a short period of time after switching on the machine as long as the display shows the following indication:



To assign the remote control, press and hold one of the buttons until the display flashes repeatedly, to indicate a match. This can take up to 12 seconds. Thus, the remote control has been assigned to the machine and may be used for wireless control.

# **FLUID SENSOR**

- 1 When the tank runs out during use, the fluid pump is switched off automatically for protection purposes and "**No Fluid**" is shown on the display.
- 2 Disconnect the fog machine from the power supply before changing the tank or filling it with fog fluid. Then, keep pressing the MANUAL button in order to completely fill the fluid hose with fog fluid again, in order to prevent the automatic pump switch-off from reactivating. Then the display shows "Ready To Fog" and the unit is ready to emit fog again.
- The fluid sensor control can be turned off in the menu (option **Fluid Sensor**). However, it is a very important protection mechanism and should remain activated for proper operation. If its activated, an "**S**" for fluid sensor is indicated in the display.

# **NOTES REGARDING OPERATION**

- During operation fog emission may stop. In this case the device is heating up again. After a short period, the machine will be ready to emit fog again. This process guarantees an appropriate vaporization temperature and the best fog emission possible. The temperature is regulated by a high-quality thermostat.
- 2 All fog machines may sputter small amounts of fog occasionally during operation and for a minute or so after being turned off.
- If you experience low output, pump noise or no output at all, disconnect from mains immediately. Check the fluid level, the thermal safety switch and the power supply. If all of the above appears to be ok, reconnect the unit again. If fog does not come out after holding the **MANUAL** button for 30 seconds, check the tube attached to the tank to make sure there is fluid going through it. If you are unable to determine the cause of the problem, do not simply continue pushing the operating button, as this may damage the unit. Return the machine to your dealer.

# **DMX512 OPERATION**

#### Quick start for use with a DMX controller

- 1 Connect the device to the mains and switch it on. The machine starts to heat up and the display shows "Warming up".
- Activate the pump by briefly pressing the **WATER PUMP** button (button illuminates). The pumping process takes about 3 minutes, during which time a humming sound is heard.
- 3 As soon as the heat-up phase is finished (approx. 3 minutes), the display shows "**Ready To Fog**". After that the machine is ready to emit fog.
- 4 Connect the output of your controller to the DMX input of the machine using a DMX cable.
- 5 Set the DMX start address in the menu using the option "DMX512Add.".
- When the machine is controlled by a DMX signal, the display shows the set DMX address. DMX control always has priority over manual operation and the remote control.

# Adjusting the DMX start address

To be able to operate the machine with a DMX controller, the DMX starting address must be set. For this, press the button **FUNCTION** so many times until "**DMX512Add.**" is indicated in the display. Use the **UP** and **DOWN** buttons to set the address between **001** and **512**. You may now start operating the machine via your DMX controller.

## **DMX functions**

For operation with a controller with DMX512 protocol, the machine is equipped with 1 control channel.

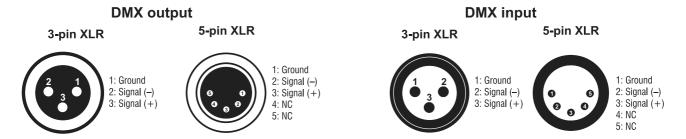
DMX value	Function
0–5	No fog output
6–255	Fog output volume (low > high)

# Making the connections

The unit features 3-pin or 5-pin XLR plugs for DMX connection.

- 1 Connect the output of your DMX controller to the DMX input **DMX IN** of the machine with a DMX cable.
- 2 Connect the DMX output **DMX OUT** of the machine to the DMX input of the next unit in the chain. Always connect one output to the input of the next unit until all units are connected.
- At the last unit, the DMX cable has to be terminated. Plug the terminator with a 120  $\Omega$  resistor between Signal (–) and Signal (+) in the DMX output of the last unit.
- 4 If the cable length exceeds 300 m or the number of DMX devices is greater than 32, it is recommended to insert a DMX level amplifier to ensure proper data transmission.

Occupation of the XLR connection:



# **CLEANING AND MAINTENANCE**





## Electric shock caused by high voltages

Within the device there are areas where high voltages may be present. Completely disconnect the device from the power supply before cleaning it or removing any covers.

## **CAUTION!**



# **Transport conditions**

Prior to transportation, allow the machine to cool down and completely empty the fluid and water tank.

## **NOTICE!**



## **Maintenance conditions**

There are no serviceable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers. Should you need any spare parts, please use genuine parts.

## After each use

- 1 Empty the fog fluid container and fill in tap water. Let the machine produce fog for about 3 minutes in order to rinse the pump and the heating element thoroughly.
- 2 To avoid leaking water or fog fluid during transport, you should transport the machine only with empty tanks. Place a collecting vessel under the valve at the bottom of the machine and open the valve. Drain all water from the machine and close the valve again. Slightly tip the machine for easier draining of the water.

Notes: All fog machines are prone to clogging due to the thick consistency of fog liquid and the high temperature at which it vaporizes. However, a properly maintained fog machine should provide years of reliable use. The Eurolite fog fluids we recommend are non-hazardous to the environment and can be disposed of via the sewage system.

# Cleaning the fan grids and output nozzles

We recommend a frequent cleaning of the unit. The fan grids must be cleaned of any contamination, such as dust, etc. on a regular basis. Fluid residues often accumulate at the outlet nozzles in particular. Please use a soft lint-free and moistened cloth for the outside of the unit. Never use alcohol or solvents!

# Cleaning the heating element and the second tank

The heating element should regularly be cleaned every 40 operational hours in order to avoid clogging. It is recommended to run a cleaning solution composed of 80% distilled water and 20% white vinegar through the system.

# Procedure:

- 1 Fill cleaning solution into empty fluid tank. Run the machine several times in a well-ventilated room. The number of repetitions depends on the pollution level of the vaporizing elements.
- 2 After use, empty all remaining cleaner and rinse the tank thoroughly.
- Also clean the second tank every 40 operating hours. Pour distilled water into this tank and let the pump run for 5 minutes. Then drain the remaining water through the valve at the bottom of the machine. The cleaning is finished.

#### Storage

It is recommended to operate the machine at least once a month with a warm-up period and a few minutes of fog emission. Prior to storage, run cleaning solution through the system as described in the cleaning regimen above. This will help avoid any particles condensing inside the pump or heater.

# Thermal safety switch

The machine is fitted with a thermal safety switch. In the unlikely event of overheating, the switch will automatically interrupt the control circuit. If the thermal switch trips, disconnect the machine from the mains and let it cool down (approx. 2 hours). Then press the thermo switch down and switch on the power again.

# PROTECTING THE ENVIRONMENT



# Disposal of old equipment

When to be definitively put out of operation, take the product to a local recycling plant for a disposal which is not harmful to the environment. Devices marked with this symbol must not be disposed of as household waste. Contact your retailer or local authorities for more information. Remove any inserted batteries and dispose of them separately from the product.



You as the end user are required by law (Battery Ordinance) to return all used batteries/rechargeable batteries. Disposing of them in the household waste is prohibited. You may return your used batteries free of charge to collection points in your municipality and anywhere where batteries/rechargeable batteries are sold. By disposing of used devices and batteries correctly, you contribute to the protection of the environment.

# **TECHNICAL SPECIFICATIONS**

Power supply:	230 V AC, 50 Hz
Power consumption:	2500 W
Circuit breaker:	F 15 A, 250 V
IP classification:	IP20
Power connection:	Mains input P-Con (blue), mounting version via Power supply cord with safety plug (provided)
Output distance:	2.5 m
Warm-up time:	3 min.
Output volume:	17 ml/min.
Tank capacity fluid:	1.81
Tank capacity water:	181
DMX connection:	5-pin and 3-pin XLR
DMX channels:	1
Control:	DMX, Wireless remote control, Timer, Manual operation
Case color:	Black
Width:	61 cm
Height:	60 cm
Depth:	80 cm
Weight:	59 kg
Remote control:	
Carrier frequency:	433.920 MHz
Battery:	12 V, type A27
Range:	approx. 20 m

Specifications are subject to change without notice due to product improvements.

# **Accessories**

EUROLITE Smoke fluid -DSA- effect, 5l	No. 5170435A
EUROLITE WRC-4 Wireless Remote Control	No. 51701962
EUROLITE DMX cable XLR 3pin 3m bk	No. 3022785H
PSSO DMX cable XLR 3pin 3m bk Neutrik	No. 30227810
EUROLITE DMX cable XLR 5pin 3m bl	No. 30227862
PSSO DMX cable XLR 5pin 3m bk Neutrik	No. 30227825



