




STAIRVILLE

WGF-2000 Water
Ground Fog 2000
fog machine

Musikhaus Thomann
Thomann GmbH
Hans-Thomann-Straße 1
96138 Burgebrach
Germany
Telephone: +49 (0) 9546 9223-0
E-mail: info@thomann.de
Internet: www.thomann.de

18.06.2020, ID: 419333 (V3)

Table of contents

1	General information	5
	1.1 Further information.....	6
	1.2 Notational conventions.....	7
	1.3 Symbols and signal words.....	7
2	Safety instructions	10
3	Features	18
4	Installation	19
5	Connections and controls	20
6	Operating	25
	6.1 System settings.....	29
	6.2 DMX operation.....	30
7	Technical specifications	33
8	Troubleshooting	34
9	Cleaning	37

10 Protecting the environment..... 39

1 General information

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under www.thomann.de.

1.1 Further information

On our website (www.thomann.de) you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

1.2 Notational conventions

This manual uses the following notational conventions:

Letterings

The letterings for connectors and controls are marked by square brackets and italics.

Examples: *[VOLUME]* control, *[Mono]* button.

Displays

Texts and values displayed on the device are marked by quotation marks and italics.

Examples: *'24ch'*, *'OFF'*.

1.3 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Type of danger
	Warning – high-voltage.

Warning signs	Type of danger
	Warning – flammable substances.
	Warning – hot surface.
	Warning - slip hazard.
	Warning – harmful or irritating substances.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended for generating artificial fog by evaporation the poured-in fog fluid together with water. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

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.

Safety



DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.



DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

Do not use the device if covers, protectors or optical components are missing or damaged.



DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



WARNING!

Risk of burns from flammable liquids

The use of flammable liquids in this device may cause severe burns and damage to property.

Always use approved fog fluids. Never fill flammable liquids into the tank of the device.



WARNING!

Risk of burns

The generated fog at the fog nozzle is hot and can cause burns. Occasionally hot fluid drops may escape from the nozzle.

The distance of persons and objects to the fog nozzle must be at least fifty centimetre (1.6 feet).

Do not touch the fog nozzle during and shortly after operation. It becomes very hot and may cause burns even several hours after switching off the device.



WARNING!

Danger of slipping from condensed water

Dripping condensation may cause the area around the device to be slippery.

Check regularly that all floors can be accessed without slipping and remove the condensed water, if necessary.



WARNING!

Health hazard caused by fog fluid handling

Fog fluid does contain glycols complying with the regulations for foodstuffs. However, it may be harmful if swallowed.

Do not induce vomiting. Seek medical advice immediately. Keep fog fluid in a safe place. If the fog fluid comes into contact with eyes rinse thoroughly with water.



CAUTION!

Possible respiratory problems

The device can be operated safely only with the approved fog fluid. The use of other fluids can release toxic gases. Claims for damages caused by the use of non-approved fluids shall be excluded.

Do not create fog in closed or poorly ventilated areas.

Do not expose persons with health problems (such as allergic respiratory conditions, asthma) to artificial fog.



NOTICE!

Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.



NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.



NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.



NOTICE!

Possible staining

The plasticiser contained in the rubber feet of this product may possibly react with the coating of your parquet, linoleum, laminate or PVC floor and after some time cause permanent dark stains.

In case of doubt, do not put the rubber feet directly on the floor, but use felt-pad floor protectors or a carpet.

General information about how to safely operate fog machines and hazers

The device was designed for use in professional event technology and works reliably when used properly. Observe the following information:

- Follow all warnings in these operating instructions.
- Never leave the device running without supervision.
- The device is not suitable for use in private households or as a child's toy.
- Place the device on a stable, fire-proof basis that is at least twice as large as the device.
- Maintain a safety distance of 1 m to flammable materials.
- The device is not intended for suspended assembly (the so-called "flying operation").
- During operation, ensure that the visibility in the room does not fall below 2 m so that everyone in the room can still orient themselves safely.
- The haze or mist generated by the device may trigger smoke alarms.

3 Features

This fog machine is suitable for use in clubs, bars, discotheques and on stages.

Special features of the device:

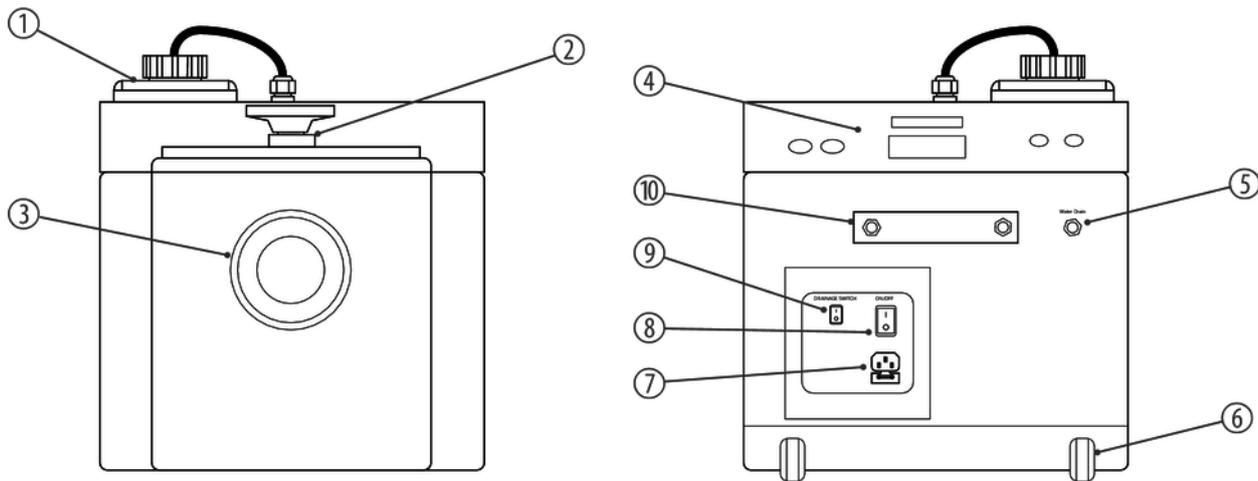
- Water based floor fog machine
- Control via DMX (three channels) as well as via buttons and display on the unit
- Operation with water and fog fluid
- Fog fluid tank capacity: 1.2 litre
- Water tank capacity: 8 litre
- Fog volume and blower power adjustable
- Up to one hour continuous output

4 Installation

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

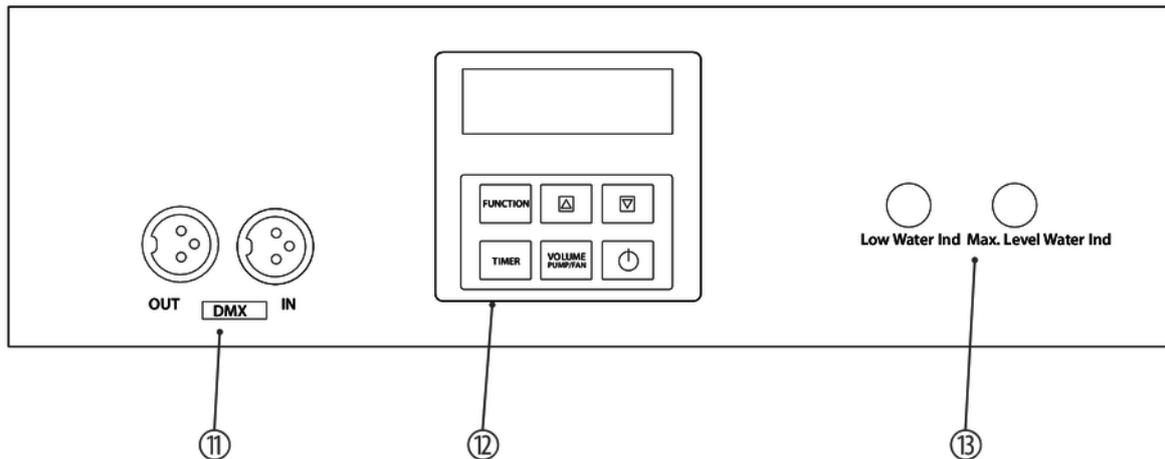
Place the device on a stable, fire-proof basis that is at least twice as large as the device. The device requires 20 cm clearance at the sides and above. The unit should be installed horizontally, a maximum deviation of 15° is allowed.

5 Connections and controls



1	Fluid tank (lateral level indicator)
2	Water tank
3	Fog nozzle
4	Control panel
5	<i>[Water drain]</i> Valve for the complete emptying of the device, for example before transport.
6	Transport casters
7	IEC chassis plug for power supply with fuse holder. Should the fuse have blown, disconnect the unit from the power supply and replace the fuse with a new fuse of the same type.
8	<i>[ON/OFF]</i> Main switch to turn the device on and off.
9	<i>[DRAINAGE SWITCH]</i> On / off switch for the water pump.
10	Carrying handle

Control panel



11	<p><i>[DMX IN]</i> DMX input to control the device via DMX.</p> <p><i>[DMX OUT]</i> DMX output for connecting additional DMX units in a DMX universe.</p>
12	<p>LCD and function buttons.</p> <p><i>[FUNCTION]</i> Button to select the operating mode and the various setting parameters.</p> <p>▲ Increases the displayed value by one and selects menu items.</p> <p>▼ Decreases the displayed value by one and selects menu items.</p> <p><i>[TIMER]</i> Button for time-controlled fog blast triggering with the previously made settings.</p>

	<p><i>[VOLUME - PUMP/FAN]</i></p> <p>Button for manual fog blast triggering with the previously made settings.</p>
	<p>⊖</p> <p>Button to exit the open menu and for turning off the fog blast in manual or time-controlled operation.</p>
13	<p>Water level indicator</p> <p><i>[Low Water Ind.]</i></p> <p>This LED lights red when the level in the water tank drops below 5 litres. The display simultaneously shows the message 'Beware: No Water!'. Fill the water tank until the LED goes out.</p> <p>If the LED should continue to light up, even if the fill level is sufficient, switch the device off and on again.</p> <p><i>[Max. Water Level Ind.]</i></p> <p>This LED lights green when the maximum filling level of the water tank is reached when refilling.</p>

6 Operating

Filling the unit

**NOTICE!****Possible damages caused by unsuitable fog fluid**

Fog liquids not approved by the manufacturer may permanently damage the unit.

Only use the fog fluids listed on www.thomann.de and follow their instructions for use.

**NOTICE!****Possible damage from calcareous or dirty water**

Too hard of water or dirty water can damage the device.

Use very soft, or even better, distilled water.

First, make sure the unit is switched off.

Open the screw-cap on the fog fluid tank and fill in the fog fluid. Make sure that no fog fluid is spilled or gets into the device. The easiest way is using a funnel. The fog fluid tank capacity is 1.2 litre.

Open the screw-cap on the water tank and fill in the water. Make sure that no water is spilled or gets into the device. The easiest way is using a funnel. The water tank capacity is 8 litre.

Screw the caps of both tanks firmly back on.

Operation

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.

Turning the unit on



NOTICE!

Fire hazard

Do not operate the machine unattended.

Connect the device to the mains power grid and turn it on with the main switch. After switching on, the display shows the current software version in 'version Vx.x' format.

The display shows the status from '0%' to '100%' during the heating process (three to four minutes). As soon as the required operating temperature is reached (display shows '100%'), the message 'Machine Ready' appears on the display. The device is operational.

Select the desired operating mode.

Operating mode selection

Press *[FUNCTION]*. The display shows *'Effect Option'*. Now use ▲ or ▼ to select the desired operating mode:

- For operation with fog fluid, select the option *'Effect Option: Heavy Mode'*.
In this mode, the device generates fog on the basis of water and fog fluid. Both the blast volume and distance can be adjusted. We recommend this operating mode for a long device service life.
- For operation with water, select the option *'Effect Option: Light Mode'*.
In this mode, the device generates fog on the basis of water. Only the blast distance can be adjusted. This operating mode is not recommended.

Specify the other device settings and start the operation manually or via a connected DMX controller.

Turning the unit off

Only turn the device off with the main switch after fog output has stopped. Transport the device only when it is completely cooled down. To avoid leaking water or fog fluid during transport, you should transport the device only with empty fluid tank.



NOTICE!

Possible mould formation due to storage with residual moisture

Residual moisture in the device can cause mould formation.

Avoid mould formation by emptying, cleaning and drying the water tank completely after repeated use and before storage. Ensure air circulation in the device.

Residual water in the drainage system of the device returns back into the water tank. Check the device during storage regularly for contamination and moisture.

6.1 System settings

Waiting time between fog blasts

Press *[FUNCTION]* until the display shows 'Wait Time Set Mode: xxS'. Now use ▲ or ▼ to set the waiting time between two fog blasts in a range from 1 ... 600 seconds.

Blast duration

Press *[FUNCTION]* until the display shows *'Start Time Set Mode: xxS'*. Now use ▲ or ▼ to set the fog blast duration in a range from 1 ... 600 seconds.

Amount of fog

This setting is only relevant when the unit is in Heavy Mode (operation with fog fluid).

Press *[FUNCTION]* until the display shows *'Timer Smoke Volume Out: xxx%'*. Now use ▲ or ▼ to set the fog volume per blast in a range from 1 ... 100 %.

Fan power

Press *[FUNCTION]* until the display shows *'Fan Adjusting Volume: xxx%'*. Now use ▲ or ▼ to set the blower power in a range from 1 ... 100 %.

6.2 DMX operation

DMX address

Press *[FUNCTION]* until the display shows *'The DMX device address set: xxx'*. Now use ▲ or ▼ to assign a desired DMX address in a range from 1 ... 510 (highest possible address in three-channel operation).

DMX assignment in operating mode Heavy Mode (operation with fog fluid)

Channel	Value	Function
1	Setting the fog volume	
	0...255	No fog output (0 %) to maximum fog output (100 %)
2	Setting the blower power	
	0...255	Blower off (0 %) to maximum blower power (100 %)
3	0...127	Selecting operating mode Heavy Mode

DMX assignment in operating mode Light Mode (operation with water)

Channel	Value	Function
1	Setting the fog volume	
	0...255	No fog output (0 %) to maximum fog output (100 %)
2	Setting the blower power	
	0...255	Blower off (0 %) to maximum blower power (100 %)
3	128...255	Selecting operating mode Light Mode

7 Technical specifications

Fog power	2000 W
Water tank capacity	8 l
Fog fluid tank capacity	1.2 kg
Warm-up time	approx. 4 min
Supply voltage	230 V ~ 50 Hz
Dimensions (W × H × D)	345 mm × 360 mm × 785 mm
Fuse	5 mm × 20 mm, 10 A, 250 V, fast-acting
Weight	24 kg
Recommended fluids	Stairville Fast Fog Fluid - CO2 Effect (item no. 209054) Stairville E-M Fluid (item no. 121307) Stairville E Fluid (item no. 105454) Stairville E-C Fluid (item no. 105455)

8 Troubleshooting



NOTICE!

Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX input or output to audio devices such as mixers or amplifiers.

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

Symptom	Remedy
The unit does not work, no fog blast	<ol style="list-style-type: none"> <li data-bbox="887 241 1517 286">1. Check the mains connection and the main fuse. <li data-bbox="887 286 1517 365">2. Check that the fog fluid and / or water tank is sufficiently filled. <li data-bbox="887 365 1517 440">3. Check the hose connections of the fog fluid and the water tank.
No response to the DMX controller	<ol style="list-style-type: none"> <li data-bbox="887 451 1517 518">1. Check the DMX connectors and cables for proper connection <li data-bbox="887 518 1517 563">2. Check the address settings and the DMX polarity. <li data-bbox="887 563 1517 608">3. Try to use another DMX controller.

Symptom	Remedy
	4. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.
Even though the water container is sufficiently filled, the display [<i>Low Water Ind.</i>] lights up and the note ' <i>Beware: No Water!</i> ' appears in the display.	Switch the device off and on again.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at www.thomann.de.

9 Cleaning



NOTICE!

Possible damages caused by unsuitable cleaning agents

Cleaners not approved by the manufacturer may permanently damage the unit.

Only use the fog machine cleaners listed on www.thomann.de and follow their instructions for use.

Clean the appliance after every 30 operating hours, or if it was not in use for a longer period of time.

Procedure

1. ▶ Make sure that the device is turned off, disconnected from the mains and completely cooled down.
2. ▶ Position the unit in a well ventilated place.
3. ▶ Insert the suction hose of the fog machine into the bottle with the fog machine cleaner.
4. ▶ Connect the device to the mains power grid and turn it on with the main switch.
5. ▶ Wait until the unit has reached the required operating temperature.

6. ▶ Change to continuous operation and let the device produce fog for about 20 seconds.
7. ▶ Insert the suction hose of the fog machine back into the fog fluid container and let the device again produce fog for about 20 seconds. This will rinse the lines.
 - ⇒ The cleaning is completed.

Fan grids

The fan grids of the device must be cleaned of any contamination, such as dust, etc. on a regular basis. Before cleaning, switch off the device and disconnect mains-operated devices from the mains. Only use pH-neutral, solvent-free and non-abrasive cleaning agents. Clean the unit with a slightly damp lint-free cloth.

10 Protecting the environment

Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

WGF-2000 Water Ground Fog 2000



