

M-Fog 1000, M-Fog 1500, M-Fog 2500

Fog Machine

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# 1 General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference. Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.

Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under <u>www.thomann.de</u>.

# 1.1 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 document.

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
A	Warning – high-voltage.
	Warning – flammable substances.

Warning signs	Type of danger
	Warning – hot surface.
<u> </u>	Warning - slip hazard.
×	Warning – harmful or irritating substances.
$\triangle$	Warning – danger zone.

# 2 Safety instructions

#### Intended use

This device is intended to be used to produce artificial fog by vaporising fog fluid. 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!

#### Risk of injury and choking hazard for children!

Children can suffocate on packaging material and small parts. Children can injure themselves when handling the device. Never allow children to play with the packaging material and the device. Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use. Never allow children to use the device without supervision. Keep small parts away from children and make sure that the device does not shed any small parts (such knobs) that children could play with.



#### DANGER!

### Danger to life due to electric current!

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 when covers, safety equipment or optical components are missing or damaged.



#### DANGER!

#### Danger to life due to electric current!

A short circuit could lead to a fire hazard and risk of death. Do not modify the mains cable or the plug! In case of isolation damage, disconnect immediately the power supply and arrange repair. If in doubt, seek advice from a qualified electrician.



#### WARNING!

#### Risk of burns from flammable liquids!

The use of flammable liquids in the device may cause severe burns and damage to property. Use only approved fog fluids. Never fill flammable liquids into the tank of the device.



#### WARNING!

### Risk of burns on the hot fog nozzle!

The fog generated on the fog nozzle is hot. Occasionally hot fluid drops may escape from the nozzle. The fog nozzle may be hot for several hours after switching off the device. Skin contact with hot fog and drops of hot liquid can lead to burns. Ensure a minimum distance of 50 cm to persons and objects during operation. Do not touch the fog nozzle during and immediately after operation. Before touching the device, always ensure that all surfaces have cooled down sufficiently.



#### WARNING!

#### Slip hazard due to condensate pools!

The fog generated by the fog machine can condense on floors and surfaces. People can slip and injure themselves on pools of condensate. Do not direct the fog to floors or other surfaces that may be stepped on. Regularly check all floors and other surfaces that can be accessed for slipping hazards. If necessary, remove any pools of condensate.



#### **WARNING!**

#### Health hazard when handling fog fluid!

Fog fluid contains glycols. There is a health risk in case of eye contact and if fluid is swallowed. Keep fog fluid in a safe place and out of the reach of children. Never ingest fog fluid and avoid contact with eyes. In case of accidental ingestion of or eye contact with fog fluid: Do not induce vomiting if swallowed. Thoroughly rinse the eyes with water upon contact. Get immediate medical attention.



#### **CAUTION!**

#### Possible respiratory problems due to fog fluid!

Fog fluid can lead to respiratory problems in case of prolonged exposure and in certain people. Using unsuitable fluids can generate toxic gases. Do not use any fog fluids other than the ones approved for the device. Any claims for compensation for damages caused by using non-approved fluids are excluded. Do not let the device produce fog in poorly ventilated areas. Do not expose people with health problems (e.g. allergy-related respiratory symptoms, asthma) to artificial fog.

#### NOTICE!

#### Risk of fire due to covered vents and neighbouring heat sources!

If the vents of the device are covered or the device is operated in the immediate vicinity of other heat sources, the device can overheat and burst into flames. Never cover the device or the vents. Do not install the device in the immediate vicinity of other heat sources. Never operate the device in the immediate vicinity of naked flames.

#### NOTICE!

#### Damage to the device if operated in unsuitable ambient conditions!

The device can be damaged if it is operated in unsuitable ambient conditions. Only operate the device indoors within the ambient conditions specified in the "Technical specifications" chapter of this user manual. Avoid operating it in environments with direct sunlight, heavy dirt and strong vibrations. Avoid operating it in environments with strong temperature fluctuations. If temperature fluctuations cannot be avoided (for example after transport in low outside temperatures), do not switch on the device immediately. Never subject the device to liquids or moisture. In environments with increased dirt levels (for example due to dust, smoke, nicotine or mist): Have the device cleaned by qualified specialists at regular intervals to prevent damage due to overheating and other malfunctions.

#### NOTICE!

#### Damage to the device due to high voltages!

The device can be damaged if it is operated with the incorrect voltage or if high voltage peaks occur. In the worst case, excess voltages can also cause a risk of injury and fires. Make sure that the voltage specification on the device matches the local power grid before plugging in the device. Only operate the device from professionally installed mains sockets that are protected by a residual current circuit breaker (FI). As a precaution, disconnect the device from the power grid when storms are approaching or it the device will not be used for a longer period.



#### NOTICE!

#### Risk of fire due to installation of a wrong fuse!

Using fuses of a different type than compatible with the device may cause a fire and seriously damage the device. Only use fuses of the same type. Observe the labelling on the device casing and the information in the "Technical data" chapter.



#### NOTICE!

#### Possible staining due to plasticiser in rubber feet!

The plasticiser contained in the rubber feet of this product may react with the coating of the floor and cause permanent dark stains after some time. If necessary, use a suitable mat or felt slide to prevent direct contact between the device's rubber feet and the floor.

# 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 fog or haze generated by the device may trigger smoke alarms.

# **Features**

This fog machine is suitable for use in clubs, bars, discotheques, on stages as well as for fire drills.

Special features of the device:

- Control via DMX (3 channels) or the removable control panel
- Suitable for mobile use
- Large liquid container for the fog liquid

# 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.

### Standing installation

When in use, the device must be mounted at a solid surface.

Place the unit on a flat surface. The device must never be operated in a more than 15° tilted position. The device requires 20 cm clearance at the sides and above.

# 5 Starting up

Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.



#### **NOTICE!**

## Data transfer errors due to improper wiring!

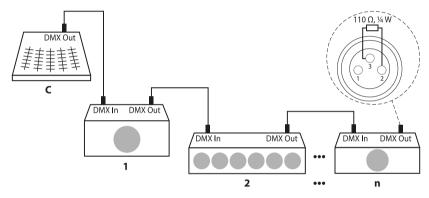


Do not connect the DMX input and output to audio devices, e.g. mixers or amplifiers.

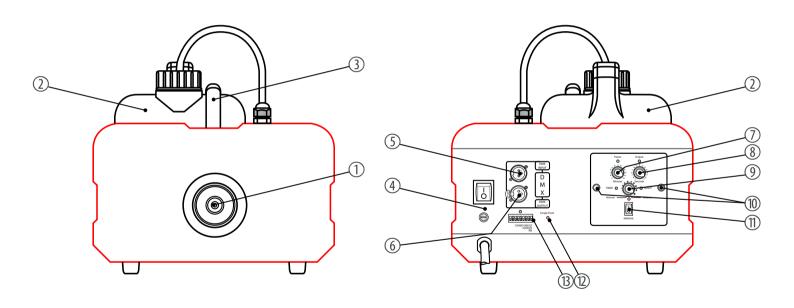
Use special DMX cables for the wiring instead of normal microphone cables.

#### **Connections in DMX mode**

Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor (110  $\Omega$ ,  $\frac{1}{4}$  W).



#### **Connections and controls** 6



1	Fog nozzle
2	Fog fluid container with screw-cap
3	Carrying handle
4	Main switch and fuse holder
5	[DMX INPUT]   DMX input
6	[DMX OUTPUT]   DMX output
7	[Minutes]   Rotary control to set the interval between two fog blasts
8	[Seconds]   Rotary control to set the duration of a fog blast
9	[Volume]   Rotary control to set the fog amount per blast
10	Thumb screws for attaching the removable control panel
11	[MANUAL]   On / off switch of the removable control panel
12	[Empty Fluid]   Indicator LED. This LED lights red if no fog fluid is left in the liquid container.
	To reset the level sensor, fill the container with the approved fog fluid and switch the device on and off.
13	DIP switch for setting the DMX address

# 7 Operating

#### Filling the unit



#### NOTICE!

### Damage to the device due to the use of unsuitable fog fluids!

Fog fluids not approved by the manufacturer may permanently damage the unit. Only use the fog fluids listed on <u>www.thomann.de</u> and follow their instructions for use.

First, make sure the unit is switched off.

Open the screw-cap of the liquid container and fill in the fog fluid. Make sure that no fluid is spilled or gets into the device. The easiest way is using a funnel. For the capacity of the containers see & Chapter 8 Technical specifications' on page 25.

Screw the cap firmly back on.

# Turning the unit on



#### **NOTICE!**

### Risk of undetected fires in the absence of supervision!

There is a general risk of fire when operating the device. If the appliance is left unattended, fires can go undetected and cause great damage.

Never operate the device unattended.

Connect the device to the mains and switch it on with the main switch. The green [Power] LED on the control panel lights up.

As soon as the required operating temperature is reached, the green [READY] LED on the control panel lights up.

When operating, always ensure that there is sufficient fog fluid in the liquid container to avoid no-load running.

### **Dry-run protection**

An electronic protection circuit switches off the pump when the fluid container and hose are empty.

If the protective circuit is tripped, refill the fog fluid and enable the protective circuit either on the DMX or as follows:

- Turn device off at main switch.
- Turn off the On / Off switch of the removable control panel.
- Put all rotary controls in neutral position.
- Turn device on at main switch.
- Turn on the On / Off switch of the removable control panel.
- Set rotary controls as desired.

#### Turning the device off

Turn off the power using the main switch. Transport the device only when it is completely cooled down. To avoid leaking fog fluid during transport, you should transport the device only with empty fluid container.

#### 7.1 Manual control

Pressing the switch[Manual] and turning the control [Volume] allows you to manually control the device without timer and DMX connection. The control [Volume] is used to regulate the amount of fog to be emitted. Please be aware that the manual control is deactivated during DMX operation! After removing the DMX-connection the fog emission can be manually reactivated in the device.

# 7.2 Time-controlled operation

The control panel can be detached from the device and used as a wired remote control (see operating elements). For this purpose, loosen the two thumb screws on the control unit.

Turn the control unit off. The green [Output] LED lights up.

Use the [Minutes] and [Seconds] rotary controls to set the interval between two fog blasts and the duration of each fog blast. Once the timer is active, the green [TIMER] LED flashes.

Adjust the intensity of the fog blast as needed using the [Volume] rotary control.

# 7.3 Function in 'DMX' mode

### **Setting the DMX address**

Use the DIP switches of the device to set the desired DMX address between 1 and 512 (see the following figure).

**DMX Address Set** 



1 2 3 4 5 6 7 8 9

DMX Add 001

ON 1 2 3 4 5 6 7 8 9

DMX Add 004

0N 1 2 3 4 5 6 7 8 9

DMX Add 002

ON 1 2 3 4 5 6 7 8 9

DMX Add 005

0N 1 2 3 4 5 6 7 8 9

DMX Add 003

ON 1 2 3 4 5 6 7 8 9

DMX Add 512

## **DMX channel allocation**

Channe I	Value	Function
1	Blast volume	
	0 11	no fog blast
	12 255	fog blast (minimummaximum)
2	interval between two fog blasts	
	010	not lit
	11	10 s
	12	20 s
	13	30 s
	14	40 s
	255	2450 s
3	Fog blast duration	
	0 10	not lit
	11	1 s

# Operating

Channe I	Value	Function
	12	2 s
	13	3 s
	14	4 s
	···	
	255	245 s

# 8 Technical specifications

		M-Fog 1000	M-Fog 1500	M-Fog 2500	
Heater power		1000 W	1500 W	2500 W	
Warm-up time		approx. 130 s	approx. 135 s	approx. 150 s	
Fluid container capaci	ity	21	21	61	
Fluid consumption		1136 ml/min	1139 ml/min	1260 ml/min	
Fog output		approx. 240 m <sup>3</sup> /min	approx. 320 m <sup>3</sup> /min	approx. 470 m <sup>3</sup> /min	
Charging time between	Charging time between fog bursts		15 s	23 s	
For burst duration, ma	For burst duration, max.		12 s	12 s	
Fog burst reach	Fog burst reach		6 m	10 m	
Control		DMX			
		Remote control			
Number of DMX channels		3			
Input connections	DMX control	XLR chassis plug, 3-pin			
Output connections	DMX control	XLR chassis socket, 3-pin			
Power consumption		990 W	1550 W	2530 W	

# Technical specifications

		M-Fog 1000	M-Fog 1500	M-Fog 2500	
Inrush current		4.24 A	6.7 A	6.7 A	
Supply voltage		230 V ∼ 50 Hz			
Fuse		$5 \text{ mm} \times 20 \text{ mm}$	$5 \text{ mm} \times 20 \text{ mm}$	$5 \text{ mm} \times 20 \text{ mm}$	
		6 A, 250 V, slow-blow	8 A, 250 V, slow-blow	12 A, 250 V, slow-blow	
Degree of protection		IP20			
Mounting options		Upright			
Dimensions (W $\times$ H $\times$ D)		234 mm × 227 mm × 415 mm	234 mm × 227 mm × 450 mm	300 mm × 262 mm × 595 mm	
Weight		6 kg	8 kg	13 kg	
Ambient conditions	Temperature range	0 °C40 °C			
Relative humidity		20 %80 % (non-condensing)			

## **Further information**

	M-Fog 1000	M-Fog 1500	M-Fog 2500
DMX control	yes	yes	yes
Blast direction	Horizontal	Horizontal	Horizontal
Timer remote control	yes	yes	yes
On / off remote control	No	No	No
Radio remote control	No	No	No
Light effect	No	No	No
Hanging bracket	No	No	No

#### **Troubleshooting** 9

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	Check the mains connection and the main fuse.		
No response to the DMX controller	1. Check the DMX connectors and cables for proper connection.		
	2. Check the address settings and the DMX polarity.		
	3. Try using another DMX controller.		
	4. Check to see if the DMX cables run near or alongside to high voltage cables that may cause damage or interference to DMX interface circuits.		
No fog output	1. Check the fluid level in the fog container.		
	2. Switch the device off and check the hose that leads into the fluid container for flow.		
	3. Check if the protective circuit has been reset after tripping, see & 'Dry-run protection' on page 20.		

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

# 10 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 <u>www.thomann.de</u> 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.

# **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.
- 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.
  - $\Rightarrow$  The cleaning is completed.

#### **Procedure**

# 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.

# 11 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.