



M-Fog 1000, M-Fog 1500, M-Fog 2500 fog machine

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



# 1.1 Further information

On our website (<u>www.thomann.de</u>) 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.

**Cross-references** References to other locations in this manual are identified by an arrow and the specified page

number. In the electronic version of the manual, you can click the cross-reference to jump to

the specified location.

Example: See & 'Cross-references' on page 7.

# 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   |  |
| A             | Warning – high-voltage.  |  |



| Warning signs | Type of danger                              |
|---------------|---|
|               | Warning – flammable substances.             |
|               | 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!

### 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**

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!

# Risk of slipping caused by condensate

Fog machines can produce condensate. Do not direct the fog to floors. Floors and surfaces can become slippery by condensed fog.

Check regularly that all floors can be accessed without slipping hazard and remove any condensate, 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!





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.

Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures).

Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.





#### 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 damage due to installation of a wrong fuse

The use of different types of fuses can cause serious damage to the unit. Fire hazard!

Only fuses of the same type may be used.



# 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, 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!

#### Possible data transmission errors

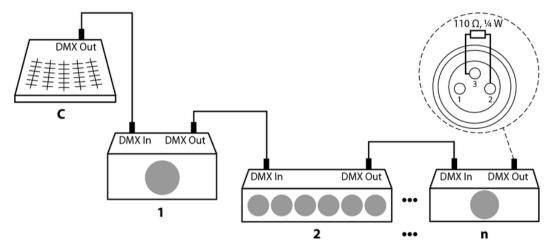
For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

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



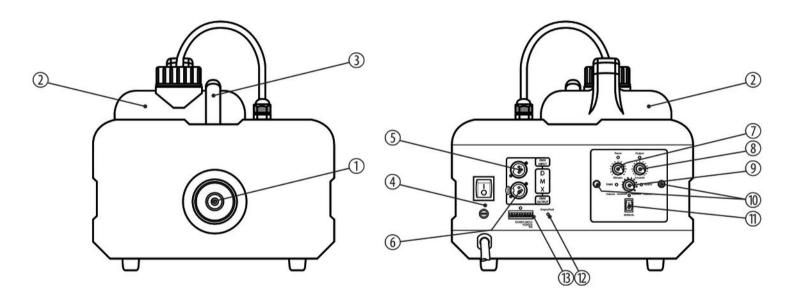
#### Connections in DMX mode

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).





# 6 Connections and controls





| 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 the fog blast.       |
| 9 | [Volume]   |
|   | Rotary control to set the fog amount per blast.            |



# Connections and controls

| 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!

# 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 <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 32.

Screw the cap firmly back on.



# Turning the unit on



#### NOTICE!

#### Fire hazard

Do not operate the machine 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).





123456789

DMX Add 004



123456789





DMX Add 003



DMX Add 512

DMX channel allocation



| Channe<br>I | Value                           | Function          |  |
|-------------|---------------------------------|-------------------|--|
| 1           | Blast volume                    |                   |  |
|             | 010                             | no fog blast      |  |
|             | 11                              | minimum fog blast |  |
|             | 255                             | maximum fog blast |  |
| 2           | interval between two fog blasts |                   |  |
|             | 010                             | not lit           |  |
|             | 11                              | 10 s              |  |
|             | 12                              | 20 s              |  |
|             | 13                              | 30 s              |  |
|             | 14                              | 40 s              |  |
|             |                                 |                   |  |
|             | 255                             | 2450 s            |  |



fog machine

| Channe<br>I | Value              | Function |
|-------------|--------------------|----------|
| 3           | Fog blast duration |          |
|             | 010                | not lit  |
|             | 11                 | 1 s      |
|             | 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. 4 min                   | approx. 7 min                   | approx. 10 min                  |  |
| Fluid container capacity       |         | 21                              | 21                              | 61                              |  |
| Fog output                     |         | approx. 240 m <sup>3</sup> /min | approx. 320 m <sup>3</sup> /min | approx. 470 m <sup>3</sup> /min |  |
| Control                        | Control |                                 | DMX                             |                                 |  |
|                                |         | Remote control                  |                                 |                                 |  |
| Number of DMX chann            | nels    | 3                               |                                 |                                 |  |
| Input connections DMX control  |         | XLR chassis socket, 3-pin       |                                 |                                 |  |
| Output connections DMX control |         | XLR chassis socket, 3-pin       |                                 |                                 |  |
| Supply voltage                 |         | 230 V ∼ 50 Hz                   |                                 |                                 |  |



|                                      |                   | M-Fog 1000                          | M-Fog 1500                  | M-Fog 2500                          |
|--------------------------------------|-------------------|-------------------------------------|-----------------------------|-------------------------------------|
| Fuse                                 |                   | $5 \text{ mm} \times 20 \text{ mm}$ | 5 mm × 20 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                     |                   | Standing                            |                             |                                     |
| Dimensions (W $\times$ H $\times$ D) |                   | 234 mm × 227 mm<br>× 415 mm         | 234 mm × 227 mm<br>× 450 mm | 300 mm × 262 mm<br>× 595 mm         |
| Weight                               |                   | 6 kg                                | 8 kg                        | 13 kg                               |
| Ambient conditions                   | Temperature range | 0 °C40 °C                           |                             |                                     |
|                                      | Relative humidity | 50 %, non condensing                |                             |                                     |



# Technical specifications

# **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         |
| Suspension bracket    | No         | No         | No         |



# 9 Troubleshooting

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 $\mbox{\ensuremath{,}}\mbox{\ensuremath{'}}$ |

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>.



fog machine

# 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  $\underline{www.thomann.de}$  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.

- **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.

#### 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.











