


STAIRVILLE

Hz-200 DMX
hazer

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

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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	19
4	Installation	20
5	Starting up	21
6	Connections and operating elements	23
7	Operating	28
	7.1 DIP switch operation.....	30
	7.2 Remote control operation.....	31
	7.3 Operating mode 'DMX'.....	32
8	Technical specifications	34

9	Plug and connection assignments.....	36
10	Troubleshooting.....	37
11	Cleaning.....	39
12	Protecting the environment.....	41

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.


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
	Warning – high-voltage.

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

2 Safety instructions

Intended use

This device is intended to be used to produce fine haze by vaporising hazer 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

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 appliance can cause serious burns and property damages.

Use only approved hazer fluids. Never fill flammable liquids into the container of the device.



WARNING!

Risk of slipping caused by condensate

Hazer can produce condensate. Do not point the haze on floors. Floors and surfaces can become slippery by condensed haze.

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



WARNING!

Health hazard when handling hazer fluid

Hazer fluid contains glycols, which meet the requirements for food products. Nevertheless, fluid is harmful if swallowed.

Do not induce vomiting. Get immediate medical attention. Keep hazer fluid in a safe place. Rinse the eyes upon contact with hazer fluid thoroughly with water.



CAUTION!

Possible respiratory problems

The device can only be operated safely when using approved hazer fluids. Using other fluids can generate toxic gases. Any claims for compensation for damages caused by using non-approved fluids are excluded.

Do not let the device produce haze in poorly ventilated areas.

Do not expose people with health problems (such as allergy-related respiratory symptoms, asthma) to artificial haze.



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.

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.



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 hazer is suitable to be used in clubs, bars, discotheques and on stages.

Special features of the device:

- Control via DMX, integrated DIP switches or via the supplied remote control
- Suitable for mobile use due to compact design

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 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!

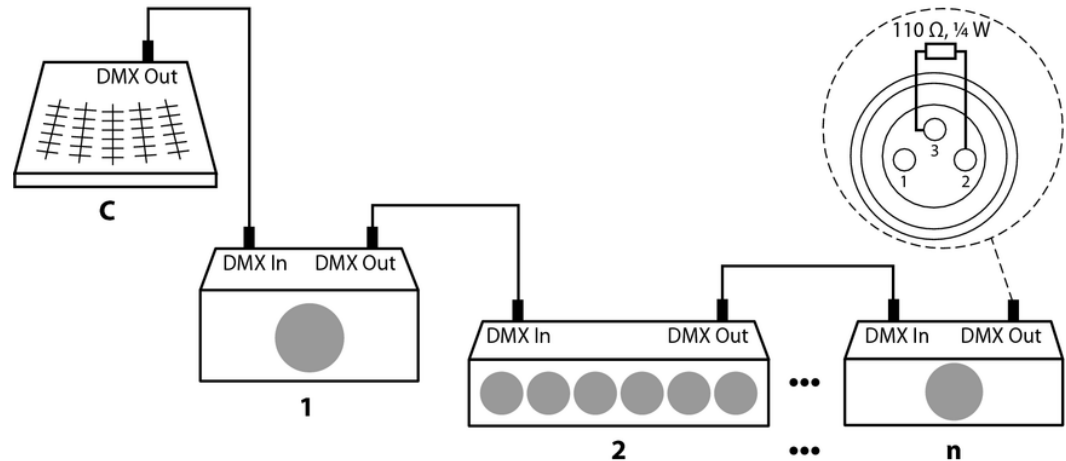
Possible data transmission errors

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.

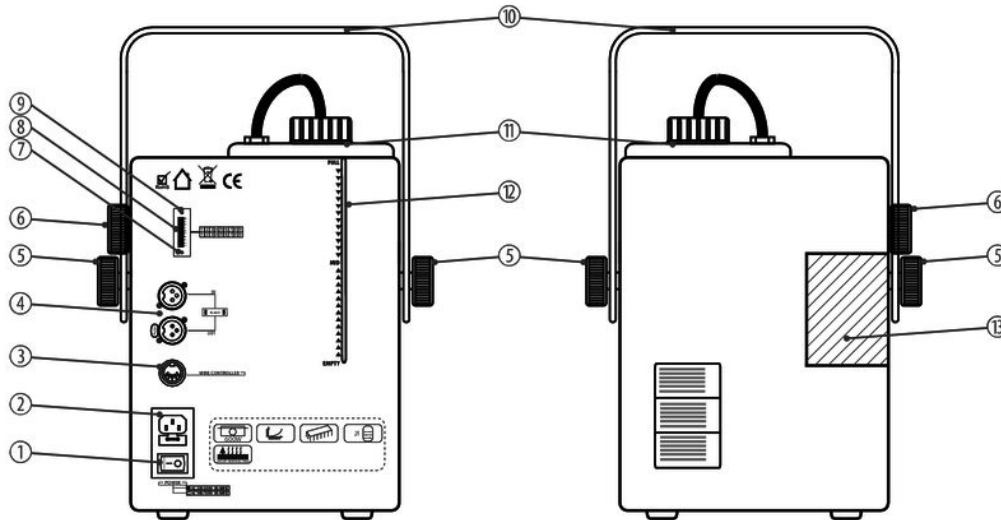
Connections in DMX mode

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 ($110\ \Omega$, $\frac{1}{4}\text{ W}$).



6 Connections and operating elements

Front and rear side



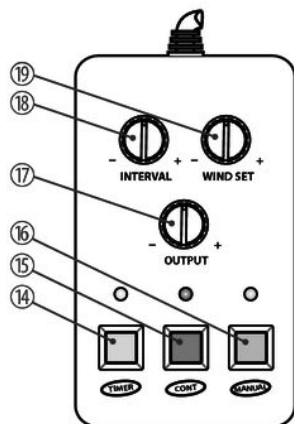
Hz-200 DMX

1	Main switch to turn the device on and off.
2	IEC chassis plug with fuse holder for the power supply
3	Connection for the supplied remote control
4	<i>[DMX IN OUT]</i> DMX in and output
5	Locking screws for the mounting bracket
6	Locking screw for adjusting and fixing the exhaust port.
7	Power LED (green) This LED flashes during operation.
8	DIP switch for setting the DMX address and the haze or air output.
9	Indicator LED (red) This LED is lit while the device is warming up. Once the required operating temperature is reached, the LED goes out.
10	Mounting bracket
11	Hazer fluid container with screw-cap

12 Liquid level indicator.

13 Haze / air nozzle

Remote control



14 [TIMER]

With this button, you can turn the Timer function on or off. In this mode, the set amount of haze / air is output in certain intervals. The corresponding LED lights while the function is enabled.

15 [CONT]

Press this button to turn continuous operation on or off. In this mode, the set amount of haze / air is output continuously. The corresponding LED lights while the function is enabled.

16 [MANUAL]

Press this button to eject the maximum haze amount; set the air amount with [WIND SET]. The associated indicator LED lights up.

17 [OUTPUT]

Rotary control to set the amount of haze to be output.

18	<i>[INTERVAL]</i> Rotary control to set the interval between two haze blasts.
19	<i>[WIND SET]</i> Rotary control to set the amount of air to be output.

7 Operating

Filling the unit



NOTICE!

Possible damages caused by unsuitable hazer fluid

Hazer fluids not approved by the manufacturer may permanently damage the unit.

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

First, make sure the unit is disconnected from the mains.

Open the screw-cap of the liquid container and fill in the hazer fluid. Make sure that no hazer fluid is spilled or gets into the device. The easiest way is using a funnel. Fill the fluid container up to the upper level indicator *[FULL]*.

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 the device on with the main switch. The appliance heats up, the red LED on the rear panel lights up.

As soon as the required operating temperature is reached, the red LED on the rear panel goes out. The device is now operational.

Operation

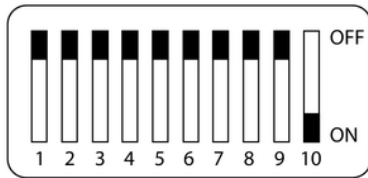
When operating, always ensure that there is sufficient hazer fluid in the liquid container to avoid no-load running.

Turning the unit off

Disconnect the device from the mains. Transport the device only when it is completely cooled down. To avoid leaking hazer fluid during transport, you should transport the device only with empty fluid container.

Remove the condensate collector pad from the haze / air outlet to dry. Put the pad back into the haze / air outlet before using the device next time.

7.1 DIP switch operation



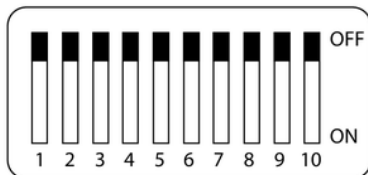
If you want to control the device only via the DIP switches on the rear panel, first set the switches 1 to 9 to *[OFF]* and switch 10 to *[ON]*. The unit then operates continuously and does not respond to DMX commands nor the remote control. The following table presents the possible settings.

SW9	SW8	SW7	SW6	SW4	SW3	SW2	SW1	Function
0	0	0	0	0	0	0	1	25 % haze output
0	0	0	0	0	0	1	0	50 % haze output
0	0	0	0	0	1	0	0	75 % haze output
0	0	0	0	1	0	0	0	100 % haze output
0	0	0	1	0	0	0	0	25 % air output
0	0	1	0	0	0	0	0	50 % air output

SW9	SW8	SW7	SW6	SW4	SW3	SW2	SW1	Function
0	1	0	0	0	0	0	0	75 % air output
1	0	0	0	0	0	0	0	100 % air output

0: DIP switch is in 'OFF' position. 1: DIP switch is in 'ON' position.

7.2 Remote control operation



If you want to control the device via remote control, set the switches 1 to 10 to *[OFF]*

Set the amount of haze or air as well as the interval between two pulses using the rotary controls and enable the desired function by a keystroke (see [Chapter 6 'Connections and operating elements'](#) on page 23).

7.3 Operating mode 'DMX'

Setting up the DMX address

The value of the DIP switches 1-9 is binary coded. To set the desired DMX address, set the DIP switches so that the sum of the resulting numbers yields the desired DMX address. Please orient yourself by the following table:

SW9	SW8	SW7	SW6	SW5	SW4	SW3	SW2	SW1	DMX address
0	0	0	0	0	0	0	0	1	1
0	0	0	0	0	0	0	1	0	2
0	0	0	0	0	0	1	0	0	4
0	0	0	0	0	1	0	0	0	8
0	0	0	0	1	0	0	0	0	16
0	0	0	1	0	0	0	0	0	32
0	0	1	0	0	0	0	0	0	64

SW9	SW8	SW7	SW6	SW5	SW4	SW3	SW2	SW1	DMX address
0	1	0	0	0	0	0	0	0	128
1	0	0	0	0	0	0	0	0	256

0: DIP switch is in 'OFF' position. 1: DIP switch is in 'ON' position.

Example: To set the DMX address 10 set DIP switches 2 and 4 to 'ON', all others to 'OFF'. The highest possible DMX address is 511 (all DIP switches to 'ON').

DIP switch 10 has no function in this mode.

DMX functions

Channel	Value	Function
1	0...255	Amount of haze 0-100 %
2	0...255	Fan speed 0-100 %

8 Technical specifications

Heater power	615 W	
Warm-up time	approx. 1.5 min	
Fluid container capacity	1.2 l	
Haze burst	approx. 34 m ³ /min	
Haze burst duration, max.	continuously	
Charging time between haze bursts	continuously	
Haze burst reach	3 m	
Input connections	Power supply	IEC chassis plug C14
	DMX control	XLR chassis socket, 3-pin
	Remote control	DIN socket, 5-pin
Output connections	DMX control	XLR chassis socket, 3-pin
Power consumption	600 W	

Supply voltage	230 V ~ 50 Hz	
Fuse	5 mm × 20 mm, 4 A, 250 V, fast-acting	
Degree of protection	IP20	
Height of housing / incl. filling port / incl. bracket	280 mm / 330 mm / 380 mm (11.02 in. / 12.99 in. / 14.96 in.)	
Weight	7.5 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	50 %...55 %, non-condensing

9 Plug and connection assignments

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment so that a perfect light experience is guaranteed.

Please take our tips, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into a socket, the result of an incorrect connection may be a destroyed DMX controller, a short circuit or 'just' a not working light show!

DMX connections



The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for the pin assignment of a suitable XLR plug.

Pin	Configuration
1	Ground, shielding
2	Signal inverted (DMX-, 'cold signal')
3	Signal (DMX+, 'hot signal')

10 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 haze output	<ol style="list-style-type: none"> 1. Check the fluid level of the hazer fluid. 2. Switch the device off and check the hose that leads into the fluid container for flow.
No response to the DMX controller	<ol style="list-style-type: none"> 1. Check the address settings and the DMX polarity. 2. Try using another DMX controller. 3. 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.

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

11 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 haze machine into the bottle with the fog machine cleaner.
4. ➤ Connect the device to the mains and switch it on with the main switch.

5. ▶ As soon as the required operating temperature is reached, the red LED on the rear panel goes out. The device is now operational.

Let the device produce haze with maximum output volume for about 20 seconds.

6. ▶ Insert the suction hose of the haze machine back into the fog fluid container and let the device again produce haze for about 20 seconds. This will rinse the lines.

⇒ The cleaning is completed.

12 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.



