



Prometheus Spark 1

Spark Effect

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Table of contents

1	General information.....	6
	1.1 Symbols and signal words.....	6
2	Safety instructions.....	9
3	Features.....	14
4	Installation.....	15
5	Starting up.....	16
6	Connections and controls.....	19
7	Operating.....	22
	7.1 Filling the device.....	22
	7.2 Switching the device on and off.....	23
	7.3 Using the main menu.....	26
	7.4 Making basic settings.....	27
	7.5 Displaying device information.....	32
	7.6 Controlling spark effects.....	32
	7.7 Menu overview.....	35
	7.8 Functions in 2-channel DMX mode.....	36
	7.9 Functions in the DMX safety channel.....	36
8	Technical specifications.....	37

9	Troubleshooting.....	40
10	Cleaning.....	42
11	Protecting the environment.....	44






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 www.thomann.de.

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.
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 – flammable substances.
	Warning – hot surface.

Warning signs	Type of danger
	Warning – harmful or irritating substances.
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended for generating cold spark fountains by igniting the filled granulate. 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 damage 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!

Risk of death from electrical current!

A short circuit can cause fires and loss of life. Always use properly insulated, tripe-core mains cable. Do not modify the mains cable. If the insulation is damaged, immediately switch off the power supply and have it repaired. If in doubt, contact a qualified electrician.



WARNING!

Risk of injury caused by titanium granulate!

Incorrect handling of titanium granulate can have serious health consequences. Do not breath in or swallow titanium granulate. Avoid contact with skin and eyes. Wear protective goggles and protective gloves when handling titanium granulate. Observe the safety data sheet.



WARNING!

Risk of fire due to uncontrolled escape of ignited titanium granulate!

Uncontrolled escaping, ignited titanium granulate can cause fires during operation that can only be extinguished with sand. Follow the instructions for filling the device in this manual. Ensure that the lid of the granulate tank is closed correctly during operation. Keep a supply of sand ready during operation in case of fire and use it to immediately extinguish leaked and ignited titanium granulate.



WARNING!

Risk of injury and fire due to improper placement!

If the device is set up incorrectly, dangerous situations may arise which could lead to fire and injury. Observe the general safety instructions for operating spark effects as well as the set-up instructions during installation. Never cover the spark outlet during operation.



WARNING!

Danger of burns on the device surface!

The surface of the device becomes very hot during operation. Skin contact can result in burns. Never touch the device with your bare hands during operation. After switching off the device, wait for at least 15 minutes before touching it.

**WARNING!****Risk of injury and fire if a defective device is operated!**

A defective device poses an increased safety risk. Operating a defective device can lead to fires and cause injuries. Never operate a defective device. Have a defective device repaired only by qualified service personnel. Do not try to repair it yourself.

**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. Never move the device to another location while it is in operation. 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 if 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.



NOTICE!

Risk of fire by exceeding the maximum current!

The device can supply power to other devices of identical design and connected in series. If too many devices are connected, the maximum permitted power consumption can be exceeded, which can cause the device to overheat and burst into flames. Only connect devices of identical design to the device. When deciding how many devices you can connect in series, make sure that the maximum output current specified on the device and in the "Technical specifications" chapter of the user manual is not exceeded. Only use power cords with a cable cross-section designed for the required current intensity when connecting the devices in series.



NOTICE!

Potential damage due to incorrect cleaning!

If the device is not properly cleaned of titanium granulate, it may lose its function and be damaged. Clean the device before and after each use. Make sure that no residues of titanium granulate collect in the spark outlet.



NOTICE!

Potential property damage due to unsuitable titanium granulates!

Titanium granulates not approved by the manufacturer may permanently damage the device. Only use the titanium granulates listed on www.thomann.de and follow their instructions for use.

Basic information on the safe operation of spark effects.

The device was designed for use in professional event technology and works safely when used properly. Note the following:

- Follow all warnings in this user manual.
- Never leave the running device unattended.
- The device is not suitable for use in private households or as a children's toy.
- The device is not intended for suspended assembly (the so-called "flying operation").
- Always operate the device on a stable, fireproof base, never on easily flammable surfaces (e.g. carpet, wooden floors, plastic floors, cardboard paper bases). The fireproof base must be at least twice the size of the device.
- During operation, make sure to maintain a minimum distance of 3 m to persons and easily flammable surfaces, and a minimum distance of at least 5 m in the direction of the spark outlet.
- Make sure that the spark outlet is never pointed directly at people during operation.
- Ensure that, during operation, persons with reduced physical, sensory and mental capabilities who cannot properly assess the hazards of the device, as well as animals, do not have access to the device at the installation site.

3 Features

The spark effect generates cold spark fountains. The spark effect is also well suited to indoor events. Thanks to its extremely compact design and the included remote control, the device is also suitable for small events and offers a unique effect that enhances any event.

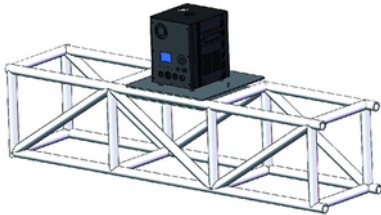
Special features of the device:

- Spark effect without gun powder
- Control via DMX or remote control
- Colour TFT display for easy operation
- Compact design compared to comparable machines
- New heating technology
- Does not require activation via RFID card, simply set it up, heat it up and get started
- Suitable granulate (item no. 557296, not included)

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.

Setup



- Make sure that no objects or materials can fall onto the device and into the spark outlet from above at the installation site (e.g. from higher platforms or parapets).
- Place the device on a flat surface. The device should be installed horizontally, a maximum deviation of 45° is allowed. The distance to adjacent surfaces must be at least 50 cm to ensure sufficient ventilation.
- When using trussing structures: Place the device on a suitable truss base plate.

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!

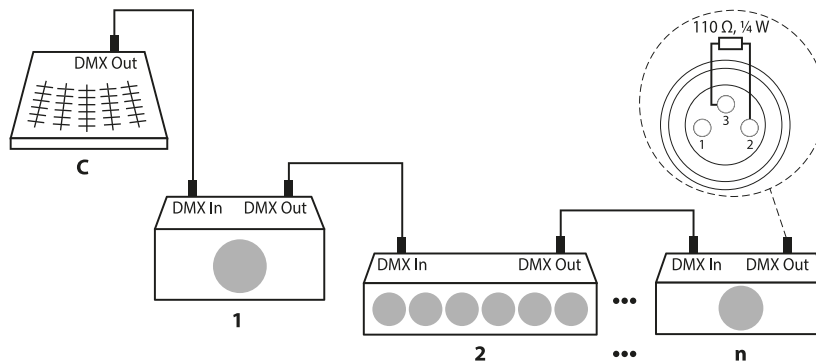
If the DMX connections are wired incorrectly, this can cause errors during the data transfer.

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



Connections in master/slave mode

When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.

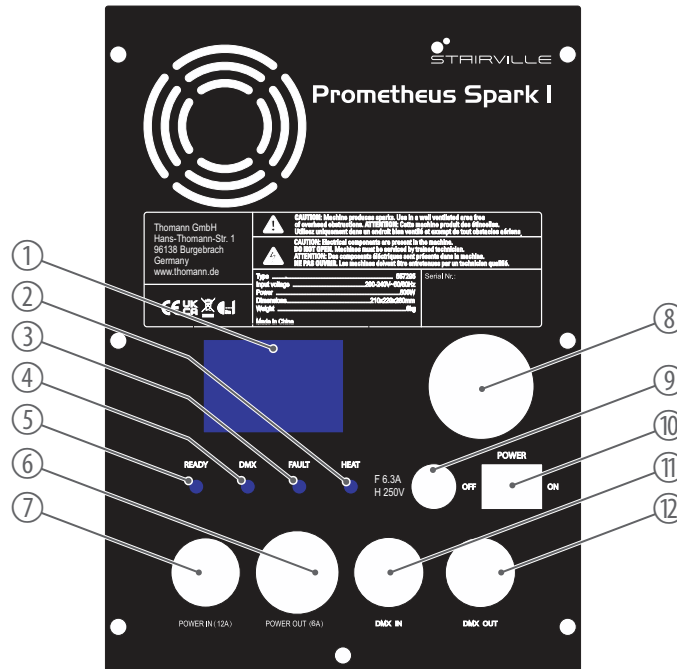
Power connection from device to device

The first device is connected to the power supply via the mains connection cable. To connect another device, connect the power input of the next device to the power output of the previous device. Only two devices can be connected to each other

Insert the remote control battery

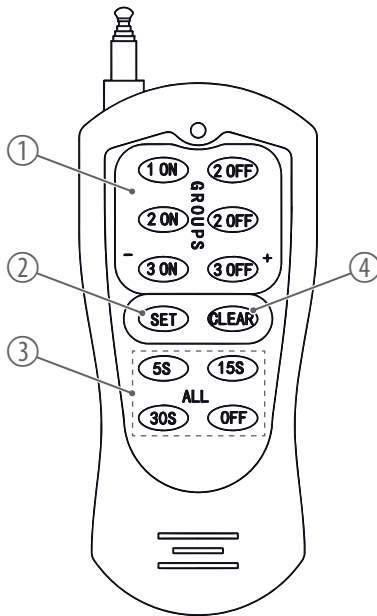
The remote control is operated with a battery To insert a battery, slide the battery cover of the remote control in the direction of the printed arrow. When inserting the battery, note the correct polarity in accordance with the printed symbols *[+]* and *[-]*. To close the battery compartment, slide the battery close until it locks.

6 Connections and controls



1	Display Displays the main menu and device information.
2	[HEAT] Lights up while the device is heating up.
3	[FAULT] Lights up when there is a malfunction.
4	[DMX] Lights up when a DMX signal is received.
5	[READY] Flashes while the device is heating up. Lights up when the device has heated up and is operational.
6	[Power OUT (6A)] Lockable Power Twist TR1 output socket for the power supply for further devices
7	[POWER IN (12A)] Lockable Power Twist TR1 input socket for the power supply
8	Function buttons
	▲ Selects a higher menu item or increases the displayed value by one.
	▶ No function
	▼ Selects a lower menu item or decreases the displayed value by one.
	◀ Returns to the previous menu level
	[OK] Calls up the main menu and selects an option or confirms the set value.
9	[F6.3A H250V] Fuse holder
10	[POWER ON/OFF] Main switch
11	[DMX IN] DMX input, 3-pin
12	[DMX OUT] DMX output, 3-pin

Remote control



- 1 **[GROUPS 1/2/3 ON/OFF]** | You can use these buttons to separately activate and deactivate three groups of devices. The groups are assigned to fixed DMX addresses. Devices that are set to this DMX address automatically belong to the respective group.
 - [GROUP 1]** | Devices that are set to DMX address 1.
 - [GROUP 2]** | Devices that are set to DMX address 3.
 - [GROUP 3]** | Devices that are set to DMX address 5.
- 2 **[SET]** | This button can be used to pair a remote control with the device.
- 3 **[ALL 5S/15S/30S/OFF]** | You can use these buttons to activate and deactivate the spark effect with the corresponding time delay for all devices.
- 4 **[CLEAR]** | This button is used to clean for 3 seconds. During cleaning, unused titanium granulate is dissolved.

7 Operating

7.1 Filling the device



WARNING!

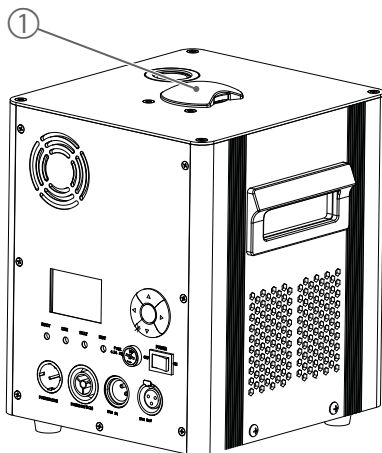
Risk of fire due to improper filling with titanium granulate!

Incorrect filling of the device can cause fires.

Only fill the titanium granulate into only into the filler neck, never into the spark outlet.

Never overfill the device.

To fill the device, only use the titanium granulates listed on www.thomann.de and follow their instructions for use.



1. ➤ Open the lid of the filler neck (1) for the titanium granulate.
2. ➤ Fill max. 150 g titanium granulate slowly and carefully into the filler neck. Ensure that you do not spill any titanium granulate.
3. ➤ Close the lid of the filler neck (1). Make sure that the lid is closed properly.
⇒ The device is filled.

7.2 Switching the device on and off

Switching the device on

1. ➤ Ensure that the device is filled with granulate. If necessary, add granulate.
2. ➤ If you are using a DMX controller to control the device, make sure the DMX controller is switched on.

3. ▶ Place the main switch *[POWER]* of the device in the *[ON]* position.

⇒ The device is turned on. The display shows the device status. The status symbols on the display light up in green.



If the status symbols light up in yellow, there is a malfunction, and the device has to be repaired.

Heating up

Before the device is ready for operation, it has to heat up. The device heats up after switching on, as soon as there is a corresponding DMX signal or if the function for automatic heating up has been activated in the basic settings.

- ➔ Activate the function for automatic heating up in the basic settings (see [🔗 'Enabling / disabling automatic heating up' on page 29](#)), or use the DMX controller to send a corresponding DMX signal for heating up (see [🔗 Chapter 7.8 'Functions in 2-channel DMX mode' on page 36](#)).
- ⇒ The device heats up. The LED *[READY]* flashes in green and the LED *[HEAT]* flashes in red.
The heating operation is finished as soon as the LED *[READY]* lights up permanently. The device is then ready for operation.



The heating process takes approx. 5...10 minutes, depending on which operating temperature has been set.



Switching the device off

- ➔ Place the main switch *[POWER]* of the device in the *[OFF]* position.
- ⇒ The device is turned off.

7.3 Using the main menu

General notes on using the main menu

The device has display menu navigation.

1.  Press the [OK] button.
 - ⇒ The main menu is called up.
2.  Select the desired values and parameter values.
 - Use the ▲ and ▼ buttons to navigate through the menu structure and set the parameter values.
 - Use the [OK] button to open a selected menu entry and copy a set parameter value.
 - Use the ◀ button to return to the previous menu.



After a certain time without input, the menu is automatically closed and the display shows the current device status again.

Enabling / disabling display lighting

1. ➤ Press the *[OK]* button.
2. ➤ Navigate to the menu via *'Advanced → TFT BackLight'*.
3. ➤ Use the ▲ and ▼ buttons to select *'ON'* (display light activated) or *'OFF'* (display light deactivated) and confirm the setting with the *[OK]* button.

7.4 Making basic settings

Enabling / disabling the tilt sensor

The device has a tilt sensor that can be activated to safely interrupt operation if the tilt is too great.

1. ➤ Press the *[OK]* button.
2. ➤ Navigate to the menu via *'Advanced → Tilt Sensor'*.
3. ➤ Use the ▲ and ▼ buttons to select *'ON'* (tilt sensor activated) or *'OFF'* (tilt sensor deactivated) and confirm the setting with the *[OK]* button.

Displaying the DMX mode

The device is operated in 2-channel DMX mode.

1. ➤ Press the *[OK]* button.
2. ➤ Navigate to the menu via '*Setting → DMX Channel*'.
 - ⇒ The device displays the DMX mode in use.

Setting the DMX address

The device responds to the commands of a DMX controller that are received via the set DMX address. Depending on the selected DMX mode (2- or 8-channel), the corresponding DMX commands of the next higher DMX channels are processed.

1. ➤ Press the *[OK]* button.
2. ➤ Navigate to the menu via '*Setting → DMX Address → Set DMXAddr*'
3. ➤ Use the ▲ and ▼ buttons to select a DMX address in the range of '1' ... '512' and confirm the setting with the *[OK]* button.

Setting the DMX safety address

For safe operation, an additional DMX safety address must be set. DMX control of the device is then only possible if a corresponding signal to switch on DMX control is sent at the same time as the standard DMX command on the DMX safety address.

1. ➤ Press the *[OK]* button.
2. ➤ Navigate to the menu via '*Setting → DMX Address → Set SafetyAddr*'.
3. ➤ Use the ▲ and ▼ buttons to select a DMX address in the range of '1' ... '512' and confirm the setting with the *[OK]* button.

Setting the heating temperature Depending on the titanium granulate, you might have to set the heating temperature.

1. ➤ Press the *[OK]* button.
2. ➤ Navigate to the menu '*Setting → Temperature*'.
3. ➤ Use the ▲ and ▼ buttons to select a heating temperature in the range of '400' ... '680' and confirm the setting with the *[OK]* button.

Setting the spark density

The spark density can be adjusted to achieve various strong spark effects.

1. ➤ Press the *[OK]* button.
2. ➤ Navigate to the menu '*Setting → Density*'.
3. ➤ Use the ▲ and ▼ buttons to select a spark density in the range of '2' ... '10' and confirm the setting with the *[OK]* button.

Enabling / disabling automatic heating up

The device can be heated up either automatically or exclusively after receiving a corresponding DMX command. When using the device without a DMX controller, the "automatic heat-up" function must be activated. When operating it with a DMX controller, this function can be activated as an option.

1. ➤ Press the *[OK]* button.
2. ➤ Navigate to the menu via '*Advanced → Auto Heat*'.
3. ➤ Use the ▲ and ▼ buttons to select '*ON*' (auto heat activated) or '*OFF*' (auto heat deactivated) and confirm the setting with the *[OK]* button.

Pairing the remote control

To use the remote control with a device, it must be bound to the device once prior to its first use so that it can be used to control the spark effect. After pairing, devices within radio range respond to the remote control that has been paired with the respective device. One remote control can be used to control several devices.



Make sure that batteries are inserted in the remote control to pair it and that the remote control is within radio range of the device with which it is to be paired.

1. ➤ Press the [OK] button.
2. ➤ Navigate to the menu via 'Advanced → MatchRemote'.
3. ➤ Use the ▲ and ▼ buttons to select 'ON' (pairing process activated) and confirm the setting with the [OK] button.
 - ⇒ The display shows 'Press key remote'.
4. ➤ To pair a remote control, press the [SET] button on the remote control.
 - ⇒ The remote control is connected to the device.

Resetting the device

The device can be reset to the following factory settings.

Setting	Factory setting
Heating temperature	'680'
DMX address	'1'
DMX mode	'2'
DMX safety address	'ON' (activated)
Tilt sensor	'ON' (activated)
Display lighting	'ON' (activated)
Automatic heating up	'ON' (activated)
Spark density	'10'

1. ➤ Press the [OK] button.
2. ➤ Navigate to the menu via 'Advanced ➔ Restore Defaults'.
3. ➤ Use the ▲ and ▼ buttons to select 'ON' (reset device) or 'OFF' (do not reset device) and confirm the setting with the [OK] button.

7.5 Displaying device information

By default, the display shows the device information for heating temperature, DMX address and operating time. Additional device information can be displayed in submenus.

1. ➤ Press the [OK] button.
2. ➤ Navigate to the 'Machine Status' menu to display DMX information, or navigate to the 'Information' menu to display information on the device version.

7.6 Controlling spark effects

The spark effect can be controlled either via the DMX controller or via the remote control.



The heating phase must have finished before the spark effect can be activated.

Using the DMX controller

The control commands for the spark effect must be sent from a DMX controller via the DMX channel set on the device. See [🔗 Chapter 7.8 'Functions in 2-channel DMX mode' on page 36.](#)



If the automatic heating function has been deactivated for DMX operation, the heating process must be started via a DMX command.

Using the remote control

The remote control can be used to control several devices paired with the remote control at the same time. The DMX address set on the respective device automatically specifies that the device belongs to one of three groups.

Devices belonging to the same group can be triggered together in the group via the remote control. All devices paired with the remote control can alternatively be triggered together, regardless of the DMX address set.

1. ➤ Pair all devices that you want to operate with the remote control with the remote control first. See [🔗 'Pairing the remote control' on page 30](#).
2. ➤ Use the table to set the DMX address of the devices to the DMX address assigned to the respective group depending on the group to which the corresponding device is to belong. See [🔗 'Setting the DMX address' on page 28](#).

Group	DMX address
1	1
2	3
3	5

- 3.** ▶ To trigger the spark effect for a group, press the *[GROUPS 1/2/3 ON]* buttons on the remote control.
- ⇒ All devices belonging to the group trigger at the same time. The pre-set spark duration is 30 seconds.



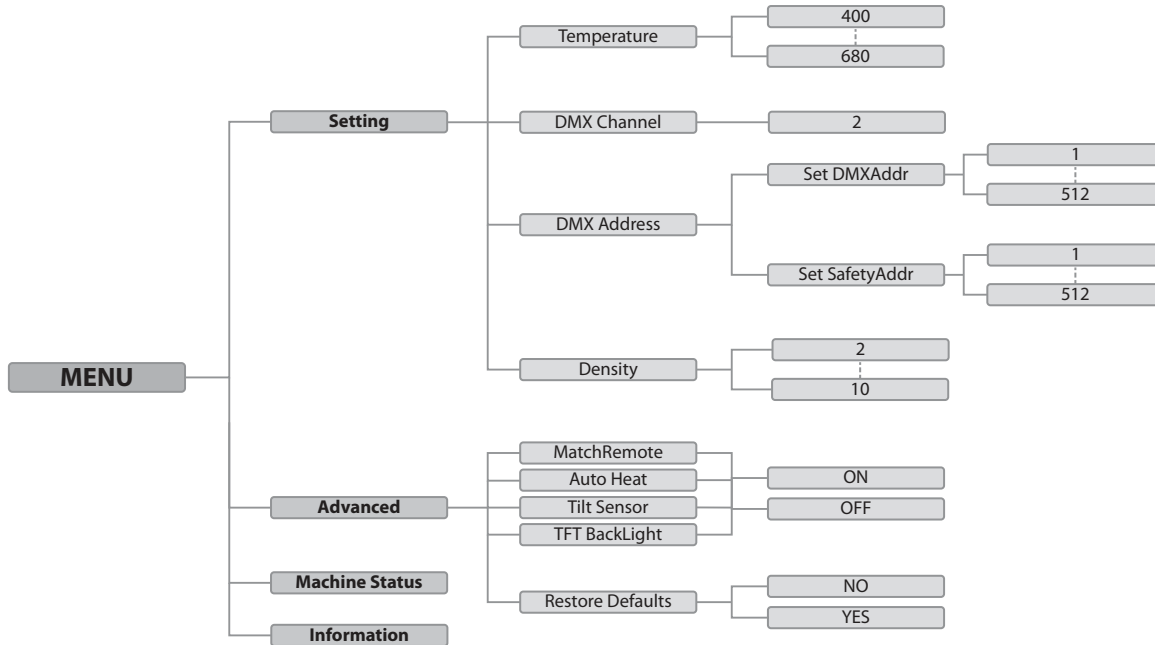
*Press the **[GROUPS 1/2/3 OFF]** buttons, if you want to end the spark effect sooner. Press the **[OFF]** button to end the spark effect early for all groups.*

- 4.** ▶ To trigger the spark effect for all devices with a time delay, press one of the buttons on the remote control in the *[ALL]* range.
- ⇒ All devices trigger at the same time. The pre-set spark duration is 30 seconds.



*Press the **[OFF]** button to end the spark effect early for all devices.*

7.7 Menu overview



7.8 Functions in 2-channel DMX mode

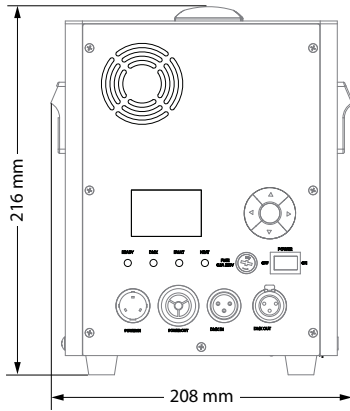
Channel	Value	Function
1	0...10	Stop
	11...255	Spark effect height 1...25
2	0...10	Deactivate heating up
	11...39	Emergency stop
	56...200	Clean material
	201...239	No function
	240...255	Activate heating up

7.9 Functions in the DMX safety channel

Channel	Value	Function
501...512	0...200	Deactivate DMX control
	201...255	Activate DMX control

8 Technical specifications

Device



Ejection height	1...5 m	
Heating time	approx. 5...10 min	
Granulate container capacity	150 g	
Granulate consumption	approx. 20...25 g/min	
Spark effect duration, max.	30 s	
Control	DMX, buttons and display on the device, remote control	
Number of DMX channels	2 + DMX safety channel	
Input connections	Power supply	Lockable input socket (Power Twist)
	DMX control	XLR panel plug, 3-pin
Output connections	Power supply for further devices	Lockable output socket (Power Twist) Output current 6 A max.
	DMX control	XLR panel socket, 3-pin
Power consumption	600 W	

Technical specifications

Supply voltage	230 V ~ 50 Hz	
Fuse	5 mm × 20 mm, 6.3 A, 250 V, fast blow	
International Protection Rating	IP20	
Mounting options	Upright	
Dimensions (W × H × D)	216 mm × 208 mm × 246 mm	
Weight	10 kg	
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20%...80% (non-condensing)

Remote control

Battery type	A23, 12 V
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Further information

DMX control	Yes
Blast direction	Vertical
Timer remote control	Yes
On / off remote control	Yes
Radio remote control	Yes
Light effect	No
Battery operation	No
Hanging bracket	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 device does not work.	Check the mains connection and main fuse.
No response to the DMX controller	<ol style="list-style-type: none"> <li data-bbox="624 487 1530 533">1. Check the DMX connectors and cables for proper connection. <li data-bbox="624 536 1530 613">2. Make sure that a corresponding signal for switching on the DMX controller is sent on the DMX safety address together with the normal DMX command. <li data-bbox="624 617 1530 663">3. Check the address settings and the DMX polarity. <li data-bbox="624 666 1530 712">4. Try using another DMX Controller. <li data-bbox="624 715 1530 790">5. Check whether the DMX cables run near or parallel to high-voltage cables that may cause damage or interference to a DMX interface circuit.
The device produces no spark effect or only a weak spark effect.	<ol style="list-style-type: none"> <li data-bbox="624 794 1530 902">1. Ensure that the device is filled with sufficient titanium granulate. If necessary, refill the device. Note the different performance characteristics of different titanium granulates. <li data-bbox="624 906 1530 944">2. Ensure that the device is not at an angle. If necessary, re-align it.

Symptom	Remedy
	3. Ensure that there is no malfunction. If necessary, switch the device off and on again.
	4. Ensure that the device has heated up. If necessary, wait until the device has heated up.
	5. Ensure that the remote control is operational and paired. If necessary, pair the remote control again.

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

10 Cleaning



NOTICE!

Possible damages caused by unsuitable cleaning agents

Cleaning agents not approved by the manufacturer may permanently damage the device.

Only use the cleaning agents listed on www.thomann.de and follow their instructions for use.

Clean the device after each use.

Procedure

1. ➤ Press the *[CLEAR]* button on the remote control or send an appropriate DMX signal from the DMX controller to clean.
 - ⇒ The device performs a short cleaning process and dissolves unused titanium granulate residues.



Cleaning takes approx. 3 seconds.

2. ➤ Make sure that the device is turned off, disconnected from the mains and completely cooled down.
3. ➤ Clean the machine from dust and material residues.

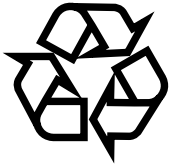
4. ▶ Clean the spark outlet with a dry cloth.

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.

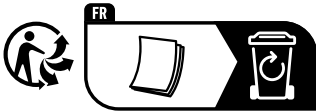
11 Protecting the environment

Disposal of the packing material



Environmentally friendly materials have been chosen for the packaging. These materials can be sent for normal recycling. Ensure that plastic bags, packaging, etc. are disposed of in the proper manner.

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

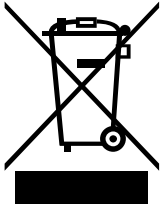


Observe the disposal note regarding documentation in France.

Disposal of operating materials

Operating materials must not be allowed to enter the environment in an uncontrolled manner. Dispose of operating materials in an environmentally friendly manner in accordance with the information in the respective safety data sheet for the operating material used.

Disposal of your old device



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) as amended.

Do not dispose of your old device with your normal household waste; instead, deliver it for controlled disposal by an approved waste disposal firm or through your local waste facility. If in doubt, consult your local waste management facility. You can also return the device to a retailer if they offer to take the device back for free or if they are legally obliged to do so. When disposing of the device, comply with the rules and regulations that apply in your country. You can also return your old device to Thomann GmbH at no charge. Check the current conditions on www.thomann.de.

Proper disposal protects the environment as well as the health of your fellow human beings. This is because the proper handling of old devices negates the potential negative effects of hazardous substances, and because it conserves resources by recycling them.

Also note that waste avoidance is a valuable contribution to environmental protection. Repairing a device or passing it on to another user is an ecologically valuable alternative to disposal.

If your old device contains personal data, delete those data before disposing of it.

