

ENGLISH

MAG:CFX®

USER AND INSTALLATION MANUAL

SPARXTAR® II



CE

PART02628 rev 01-03

DISCLAIMER

⚠ WARNING

Read this manual carefully before installing and/or using this product. Failure to read the manual and to follow the printed instructions may lead to personal injury and/or damage to the product.

© 2026 MAGICFX®

All rights reserved.

Nothing from this publication may be copied, reproduced and/or published by means of printing, photocopying or by any other means, without the prior written approval of MAGIC FX.

MAGIC FX reserves the right to modify specifications stated in this manual.

TRADEMARKS

Any brand names mentioned in this manual are registered trademarks of their respective owners.

LIABILITY

MAGIC FX accepts no liability for claims from third parties arising from unauthorised use, use other than that stated in this manual, and use other than in accordance with the General Conditions registered at the Chamber of Commerce.

We further refer to the General Conditions. These are available on request, free of charge.

Although considerable care has been taken to ensure a correct and comprehensive description of all relevant components, the manual may nonetheless contain errors and inaccuracies. Always check the latest version of the manual.

Should you detect any errors or inaccuracies in the manual, we would be grateful if you would inform us. This helps us to further improve our documentation.

TABLE OF CONTENTS

Introduction	4
Target group	4
Language	4
Abbreviations	5
Revision table	5
1. Description	6
1.1 Main parts	6
1.2 Technical data	7
1.3 Product identification	8
1.4 SPARXTAR® powder	8
1.5 Accessories	9
1.6 DMX control	9
1.7 Display panel	11
1.8 RDM capability	14
2. Safety	16
2.1 General safety rules	16
2.2 Indoor & outdoor use	16
2.3 Rigging	16
2.4 Noise levels	17
2.5 Safety symbols	17
2.6 Safety warnings	18
2.7 Risk zones	19
3. Installation and use	22
3.1 Install on stage	22
3.2 Mount on a truss	23
3.3 (Re)fill the hopper	25
3.4 Connect the machine	27
3.5 Heat up	28
3.6 Spark with DMX	29
3.7 Clean up	30
4. Troubleshooting	32
4.1 Loosen spindle motor	33
5. Maintenance	34
5.1 Inspection and maintenance	34
5.2 Clean the air filter	35
6. Warranty	36
7. Correct disposal	36
8. EC Declaration of Conformity	37

INTRODUCTION

Congratulations! You have bought a great new product from MAGIC FX.

This manual contains all information required for the intended use of the equipment. Deviation from the described intended use can result in a hazardous situation and/or property damage.

This manual includes notes and warnings on safe operation of the equipment. These notes and warnings are accompanied by the following icons. Read them attentively!

 DANGER	Indicates a hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.
 WARNING	Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
 NOTICE	Indicates information considered important, but not hazard-related (e.g. messages relating to property damage).

TARGET GROUP

This manual is targeted at authorised personnel in the event industry that install and operate the SPARXTAR® II.

Authorised personnel are those who:

- Are appointed by their supervisor to install and/or operate the SPARXTAR® II.
- Are trained in recognizing and avoiding hazards related to SFX applications at events.
- Are familiar with and abide by the applicable local, national and international laws and regulations.

LANGUAGE

This document contains the original instructions in English. In case you require other languages please contact MAGIC FX.

ABBREVIATIONS

Abbreviation	Description
SFX	Special effects
DMX	Digital Multiplex
RDM	Remote Device Management
SPARXTAR® II	MAGICFX® SPARXTAR® II

Abbreviations

REVISION TABLE

Doc nr	Revision	Date	Description	Author	Approved
PART02628	01-00	02-07-2025	Initial release	MB	NB
PART02628	01-01	29-07-2025	Safety additions	MB	NB
PART02628	01-02	02-09-2025	Minor changes	MB	NB
PART02628	01-03	22-05-2026	Software update	MB	NB

Revisions

1. DESCRIPTION

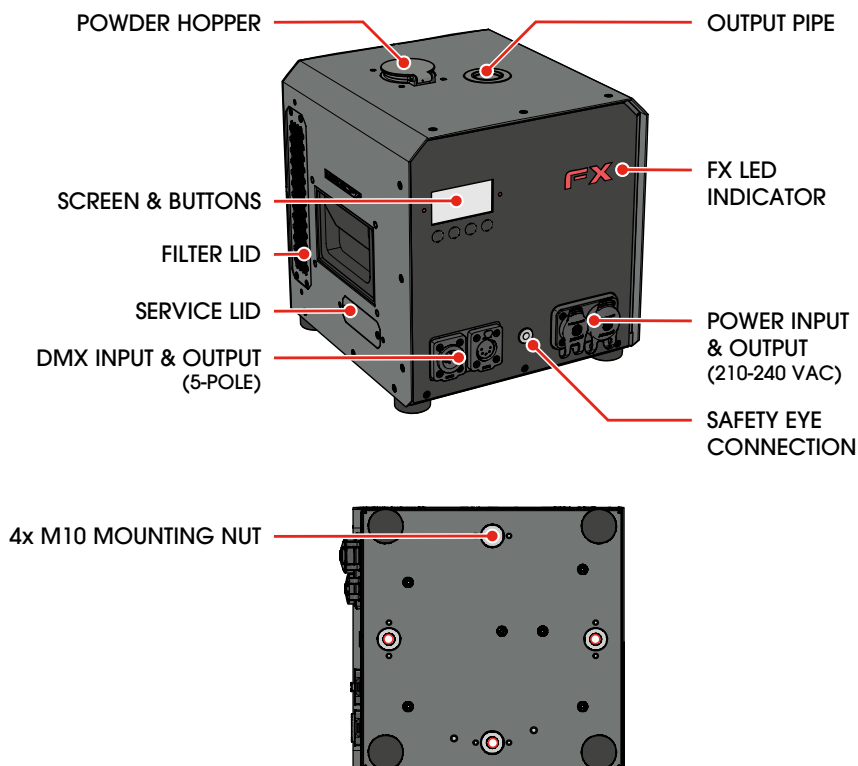
The SPARXTAR® II is a special effects machine designed to produce a controlled fountain of sparks. The machine blows sparks up to 5 meters high, making it suitable for use in stage shows, live events, and other professional visual displays.

The machine draws SPARXTAR® powder from a 150-gram hopper, heats it internally, and blows the sparks through the output pipe.

The machine supports continuous effects for up to 60 seconds, with automatic shutoff, and delivers 6 minutes of total effect per full hopper.

Built for professional applications, the SPARXTAR® II features DMX and RDM control. The extended DMX functionality of the heater allows the heater to be switched on and off to optimize power consumption.

1.1 MAIN PARTS



Main parts

1.2 TECHNICAL DATA

Product	Product Name	MAGICFX® SPARXTAR® II	
	Product Code	MFX5003	
	Product Type	SPARK FX	
Main Dimensions	Length	233 mm	9.2 in
	Width	226 mm	8.9 in
	Height	254 mm	10 in
Weight	Weight	9.5 kg	20.9 lb.
Package	Length	361 mm	14.2 in
	Width	294 mm	11.6 in
	Height	328 mm	12.9 in
	Packaged Weight	10.25 kg	22.6 lb.
Environment	Minimum Temperature	- 10 °C	14 °F
	Maximum Temperature	50 °C	122 °F
	Humidity (Relative)	20 to 90 % (non-condensing)	
Electrical	Voltage Input (VAC)	210 - 240 VAC	
	Voltage Frequency	50 - 60 Hz	
	Power Consumption (VAC)	700 W	
	Power Connector (VAC)	Neutrik® powerCON TRUE1 (in&out)	
Controlling	Control Options	DMX	
	Control Protocols	DMX512-A (ANSI E1.11) RDM (ANSI E1.20)	
	Control Connectors	Neutrik® 5-pole male/ female XLR	
Configuring	Configure Options	On device RDM	
Usage	Consumable(s)	MAGICFX® SPARXTAR® Powder	
	Consumable Consumption	~25 g/min	
	Hopper capacity	Max. 150 g	

Technical data

1.3 PRODUCT IDENTIFICATION



Type plate

1.4 SPARXTAR® POWDER

The SPARXTAR® II uses SPARXTAR® powder to create the effect. Fill the powder hopper of the machine with powder (maximum of 150 grams).

CAUTION	Do not use other powders than those that are approved and supplied by MAGIC FX, see the following table. Always follow the instructions as noted on the powder packaging. The warranty is void if other powders are used.
NOTICE	The powder is packed in vacuum bags. Do not open the bags until right before use. This will prevent degradation and malfunctioning of the powder.

Code	Type of powder
MFX5102	MAGICFX® SPARXTAR® Powder

Type of powder

1.5 ACCESSORIES

Code	Product
MFX3106	Doughty Half Coupler (100 kg) M10
MFX3104	Doughty Quick Trigger Clamp (100 kg) M10
MFX3111	Safety Cable SWL 20 kg L=600mm

Accessories

Please contact MAGIC FX for additional possibilities.

1.6 DMX CONTROL

NOTICE

Always plug in a DMX Terminator into the DMX output of the final unit in the control sequence. Using a DMX Terminator improves signal reliability.

1.6.1 STANDARD PERSONALITY

The SPARXTAR® II is controlled with 1 enable address and 2 operational addresses in standard personality.

DMX Address	Address range	Channels
Enable address	1 - 512	1 Enable / setting
Start address	1 - 511	1 Trigger
		2 Height

DMX addresses

1.6.2 EXTENDED PERSONALITY

To unlock additional DMX functionalities, activate the extended personality via the menu. Navigate to DMX/RDM settings, then select DMX Personality and choose the Extended personality option. With the extended personality activated, SPARXTAR® II is controlled with 1 enable address and 3 operational addresses.

DMX Address	Address range	Channels
Enable address	1 - 512	1 Enable / setting
Start address	1 - 510	1 Trigger
		2 Height
		3 Heater

DMX addresses

1.6.3 DXM SHEET

The enable address cannot be the same as the start address. Operation of the channels results in the following:

Channel		Function		
Enable	1 - Trigger	2 - Height		
0 - 24				
25 - 64				Hold ≥ 3s: reset locking errors
100 - 154	0 - 199			
	200 - 255	0 - 255		Output effect with height 2 - 5m
155 - 199				
200 - 255	0 - 99			
	100 - 154			Hold ≥ 3s: cleaning mode on
	155 - 255			
Extended personality				
		3 - Heater	Function	
		0 - 94		
		95 - 134	Hold ≥ 3s: heater off	
		135 - 214		
		215 - 255	Hold ≥ 3s: heater on	

Operation of the DMX channels

NOTICE

The maximum continuous duration of the effect is 60 seconds. After this period the effect will stop automatically. To start the effect again you must disable and re-enable the effect Trigger channel.

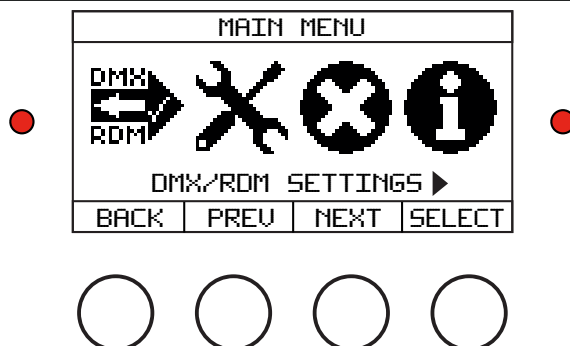
NOTICE

The heater can also be turned ON or OFF manually through the configuration menu, or via RDM.

NOTICE

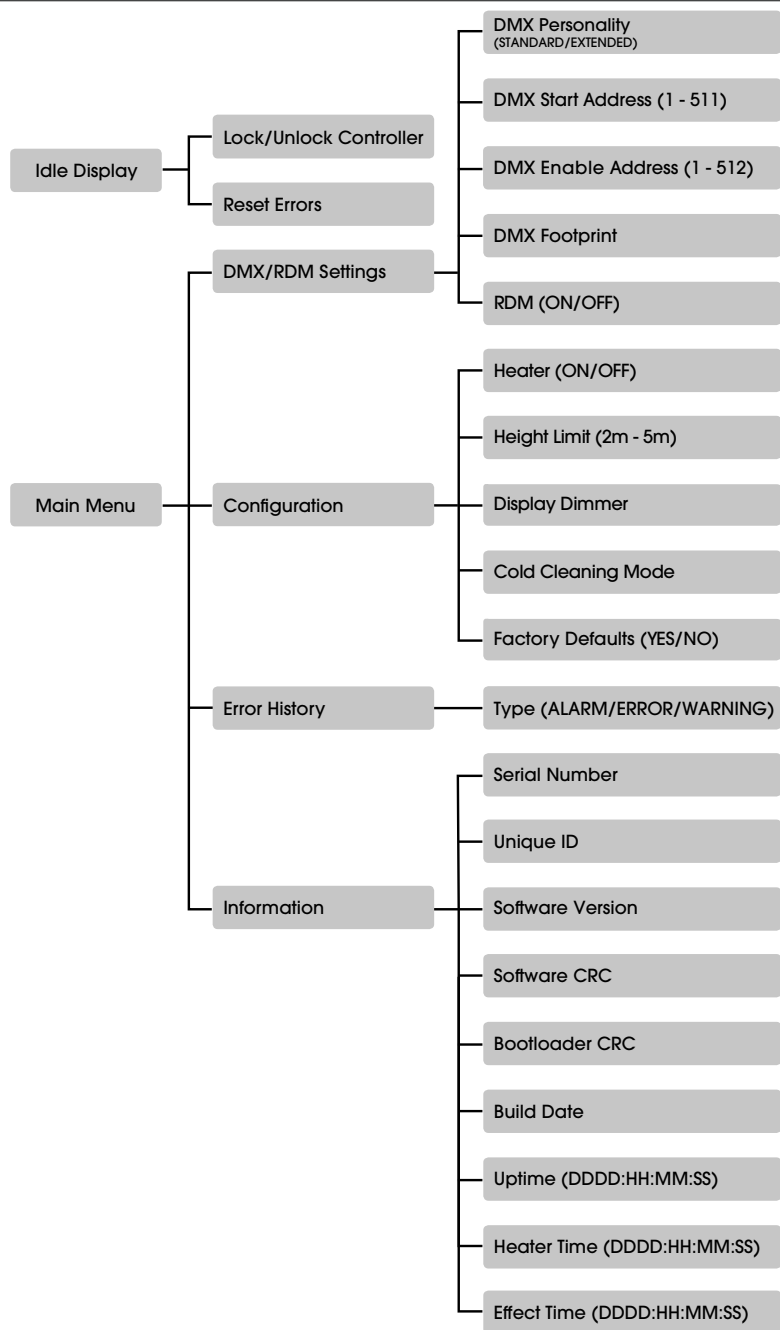
When the heater is disabled the effect cannot be triggered.

1.7 DISPLAY PANEL



Display panel

The display panel is located on the backside of the SPARXTAR® II. Check the following menu structure for all options in the menu. Use the buttons for navigation and selection. The left-hand LED blinks red when DMX is active. The right-hand LED continuously lights red when an error is present.



Menu structure

Menu function	Explanation
Lock/Unlock Controller	Holding the Lock button for more than 5 seconds will "lock" the display functions. Meaning buttons will not respond. This to avoid accidental change of parameters via the display. To unlock, hold the Unlock button for more than 5 seconds. In case system is armed display is locked.
Reset Errors	In case there is a locking error present, this button will reset the appliance. If the fault does not persist, the locking error will not reappear.
DMX Personality (STANDARD/ EXTENDED)	Set the DMX personality to standard (enable & start channel) or extended (enable & start + heater channel)
DMX Start Address (1-511)	Setting the DMX Start Address.
DMX Enable Address (1-512)	Setting the DMX Enable Address.
DMX Footprint	This parameter indicates the DMX footprint, in other words the amount of sequential channels used by the appliance. This does not include the enable channel.
RDM (ON/OFF)	Use this function to turn on/off the RDM functionality.
Heater (ON/OFF)	Enables or disables the heater. This setting can also be set using the DMX heater channel when in EXTENDED mode, or by RDM.
Height limit (2m-5m)	Use this function to set the maximum output height. If the DMX value exceeds this limit, the output will be limited accordingly.
Display Dimmer (ON/OFF)	Turn display dimmer on or off. If turned on, the display is dimmed automatically 30 seconds after the last button push.
Cold cleaning mode	Use this function to enable the cleaning mode when the heating level is below 55%. See section 3.7.2, "Cold Cleaning Mode," for safety information and detailed instructions.
Factory Defaults (YES/NO)	Restores the appliance factory default settings.
Type (ALARM/ ERROR/WARNING)	Switch between the current locking errors (Alarm), blocking errors (Error), and warnings. Locking errors can be reset by the user, through the menu or using DMX. Blocking errors clear themselves once the triggering fault disappears. A total of 16 locking errors, 16 blocking errors and 16 warnings are logged. The most recent error is displayed at the top of the list.
Serial Number (DDDDD)	Appliance serial number as also printed on the appliance label.

Menu functions

Menu function	Explanation
Unique ID (HHHHHHHHHHH)	UID number as the appliance appears in the RDM device list after running discovery.
Software Version	Installed software version.
Software CRC	CRC of the functional software.
Bootloader CRC	CRC of the bootloader software.
Build Date	Release date of functional software.
Up-time (DDDD:HH:MM:SS)	Time counter which indicates how long the appliance has been powered in total.
Heater-time (DDD:HH:MM:SS)	Time counter which indicates how long the heater has been enabled in total.
Effect-time (DDDD:HH:MM:SS)	Time counter which indicates how long the effect has been on in total.

Menu functions

1.8 RDM CAPABILITY

Remote Device Management Protocol (RDM) is an enhancement of the DMX512 communication protocol. RDM can be used for configuration and status monitoring while DMX512 takes care of the default controlling.

For RDM you will need an RDM compatible controller.

The following RDM parameters are supported by the SPARXTAR® II.

Parameter ID	Discovery	GET	SET
DISC_UNIQUE_BRANCH	X		
DISC_MUTE	X		
DISC_UN_MUTE	X		
DEVICE_INFO		X	
SUPPORTED_PARAMETERS		X	
PARAMETER_DESCRIPTION		X	
SOFTWARE_VERSION_LABEL		X	
DEVICE_MODEL_DESCRIPTION		X	
MANUFACTURER_LABEL		X	
SLOT_DESCRIPTION		X	
DMX_PERSONALITY_DESCRIPTION		X	
SENSOR_DEFINITION		X	
SENSOR_VALUE		X	
DMX_START_ADDRESS		X	X

RDM parameters

Parameter ID	Discovery	GET	SET
IDENTIFY_DEVICE		X	X
DEVICE_LABEL		X	X
RDM_PID_SET_ENABLE_ADDR		X	X
RDM_PID_HEATER_ENABLE		X	X
FACTORY_DEFAULTS		X	X
DMX_PERSONALITY		X	X
RESET_DEVICE			X

RDM parameters

RDM parameters are subject of change due to software updates. Contact MAGIC FX for the latest information and updates.

The following sensors are available through RDM:

Sensor	Description
Heating percentage	The heater percentage is displayed to indicate the status of the heater. It represents the progress of the heat-up process. Once the device is ready, the percentage reflects the remaining effect time.
Error code	0 = no error. All other numbers indicate an error.

2. SAFETY

The SPARXTAR® II has been designed and constructed in such a manner that it can be used safely. This applies to the use, the circumstances and the regulations as described in this documentation. Reading this documentation and following the instructions are therefore necessary for everyone who is authorised to work with the SPARXTAR® II.

The SPARXTAR® II must be used in surroundings that:

- Have a reasonably stable temperature of between -10 and 50 °C.
- Have a relative humidity degree between 20 % and 90 % (non condensing).
- Are free of corrosive gases and high concentrations of organic vapours.
- Are not situated in the vicinity of a source of vibration.

2.1 GENERAL SAFETY RULES

- Only authorised persons may work with the SPARXTAR® II.
- Do not use the SPARXTAR® II if there are people or animals in the direct output (see Chapter 2.7).
- Make sure that children, unauthorised people and animals do not obtain access to the SPARXTAR® II (see Chapter 2.7).
- Install the SPARXTAR® II only on non-combustible surfaces.
- Make sure there are no freestanding objects or objects that can be damaged by the SPARXTAR® II within the output distance.
- Do not place flammable objects within the indicated safety zones.
- Do not connect more units to a single electrical circuit than the installed fuse is able to handle. (Calculate the summed load with the electrical data from Chapter 1)
- Do not remove any safeguards, safety caps and safety symbols.
- All required safety devices must be in good condition and function properly.
- Ensure sufficient lighting of the surroundings.
- Keep the workplace clean.

2.2 INDOOR & OUTDOOR USE

The SPARXTAR® II is designed for use in well-ventilated indoor spaces and dry outdoor use.

NOTICE

Always keep the machine dry and do not let excessive amounts of liquids such as rain or snow wet the machine.

2.3 RIGGING

Please follow the European and/or national guidelines for safe rigging and trussing.

2.4 NOISE LEVELS

The maximum noise levels of the product are 78 dB(A), measured at 1 m distance and a height of 1.5 m from the ground. Please follow the European and national guidelines regarding hearing protection.

2.5 SAFETY SYMBOLS

Symbol	Meaning	Position
	Read the manual carefully before use.	Front of the machine.
	Warning: Hot parts. The output pipe becomes hot during operation. Touching it may cause burns. Do not touch the output pipe. Warning: Hot flying particles. The output is HOT and may cause burns and eye damage. Hot output may fall and ignite flammable surfaces. Keep humans and animals out of the defined risk zones during operation. Install only on non-combustible surfaces.	Top of the machine, near the output pipe.
	Wear certified safety goggles.	In the manual.
	Make sure ALL people, animals, and objects are clear of this area. Failure to do so could result in death, serious injury, or damage.	In the manual.
	Make sure unauthorized personnel and animals are clear of this area. Failure to do so could result in death or serious injury.	In the manual.

Safety symbols

Symbol	Meaning	Position
	Make sure there are no flammable objects or materials in this area. Failure to do so could result in death, serious injury, or damage.	In the manual.
	Do not use water to extinguish. Burning SPARXTAR® Powder could react dangerously with water. Failure to do so could result in death, serious injury, or damage.	In the manual.

Safety symbols

2.6 SAFETY WARNINGS

WARNING

Eye contact with flying sparks and hot particles from the machine can lead to serious eye injury. Always wear safety goggles when you enter the hazardous zone.



WARNING

In case of fire involving SPARXTAR® powder, do not use water to extinguish. Burning SPARXTAR® Powder could react dangerously with water.



Failure to do so could result in death, serious injury, or damage.

Consult the MSDS of SPARXTAR® powder from our website for detailed safety instructions and firefighting measures.

WARNING

Using a damaged or an improperly installed machine can lead to death, serious injury or property damage. Always inspect the machine thoroughly before operation.

WARNING

Unauthorized operation of the machine can lead to death, serious injury or property damage. Never leave the machine unattended when the machine is ready for use.

WARNING

Missing or obscured safety symbols on the machine can lead to death or serious injury. Make sure all safety symbols are correctly in place and visible, see section 2.5

WARNING

Always follow the safety instructions from the powder packaging when handling and working with the powder. Consult the MSDS from our website for detailed safety instructions.

WARNING

Do not connect more units to a single electrical circuit than the installed fuse is able to handle. (Calculate the summed load with the electrical data from Chapter 1.)

⚠ WARNING

Do not obscure the air inlets on the side of the machine. Obscured air inlets can result in injuries, fire and damage to the machine when the machine is used.

⚠ WARNING

Only open the hopper lid when there are no nearby ignition sources, such as other active SPARXTAR® II units.

⚠ CAUTION

The output pipe heats up during operation and causes burns when touched. Do not touch the output pipe of a (recently) powered machine.

⚠ CAUTION

Do not use wet consumables.

2.7 RISK ZONES

⚠ WARNING

Note that the risk zones shift accordingly when the machine is installed in a tilted position. Keep the entire zone and all areas beneath it clear from unauthorized people, animals, and flammable objects.

⚠ WARNING

Note that the risk zones shift and increase with wind.

⚠ WARNING

Stop operating the machine immediately if the emitted particles remain glowing or cause fire in other objects or materials. Extinguish any burning or glowing particles using the methods described in the MSDS of SPARXTAR® powder. The MSDS of SPARXTAR® powder can be found on MAGICFX.com.

⚠ WARNING

Any material that blocks the output pipe could result in injuries, fire, and damage to the machine when the machine is used. Always inspect the output pipe before operating and remove any obstructing material.

⚠ WARNING

Before entering the hazardous zone, verify that the machine is disabled by confirming that the FX LED is off.

⚠ WARNING

Keep the entire zone and all areas beneath it clear from unauthorized people, animals, and flammable objects.

NOTICE

Note that overlap of risk zones in a setup with multiple machines is allowed, as long the air inlets are not obstructed.

2.7.1 DANGER ZONE

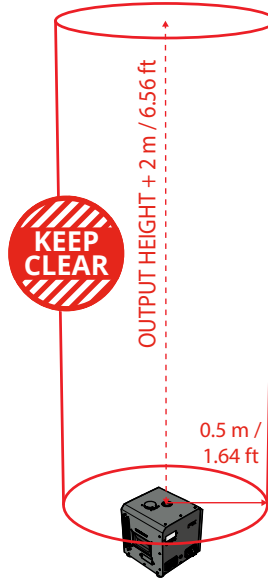
Symbol



Meaning

Make sure **ALL** people, animals, and objects are clear of this area. Failure to do so could result in death, serious injury, or damage.

⚠ WARNING

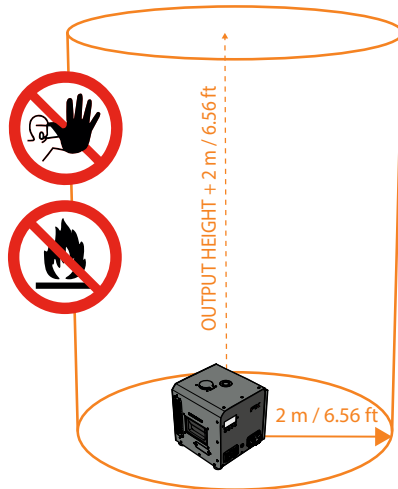


Always create a danger zone around the output pipe of the SPARXTAR® II as indicated in the illustration.

2.7.2 HAZARDOUS ZONE

Symbol	Meaning
	Make sure unauthorized personnel and animals are clear of this area. Failure to do so could result in death or serious injury.
	Make sure there are no flammable objects or materials in this area. Failure to do so could result in death, serious injury, or damage.

WARNING



Always create a hazardous zone around the output pipe of the SPARXTAR® II as indicated in the illustration.

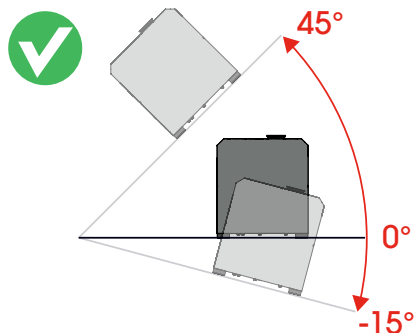
3. INSTALLATION AND USE

The SPARXTAR® II can be positioned on a stage or floor, or can be mounted on a truss.

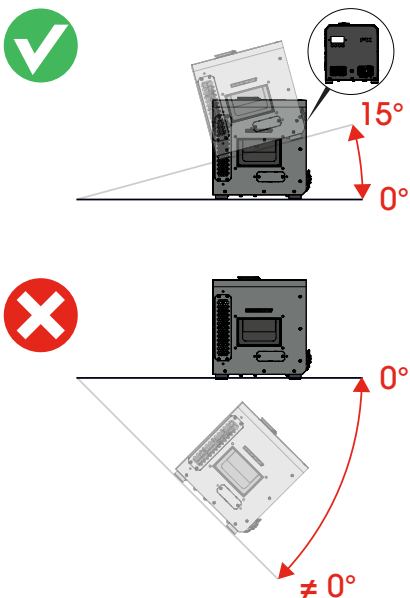
The SPARXTAR® II can be tilted during use. For the best performance, tilt the machine to the left (viewed from the front). Tilting the machine in other directions can reduce the effect's strength.

Avoid tilting the SPARXTAR® II backwards, as this could cause powder to build up inside and lead to clogging.

front view



side view



3.1 INSTALL ON STAGE

CAUTION

Keep a minimum distance of 15 cm (or 5.9 inches) between the machines.

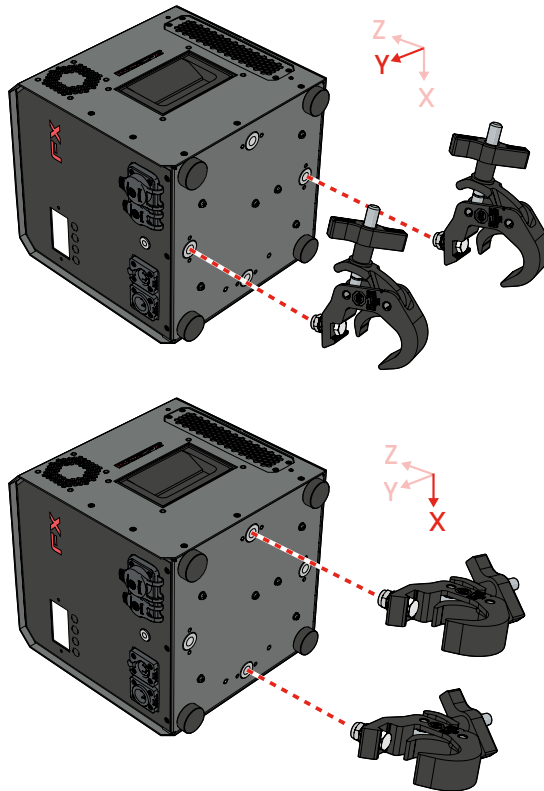
1. Install the SPARXTAR® II on a firm and preferably level surface.
2. Inspect the machine and remove any foreign objects and material that will block or obscure the output pipe or the air inlets of the machine during operation.

3. Take the necessary safety precautions, including defining the risk zones around the output pipe of the SPARXTAR® II:
 - a. Keep the danger zone clear of any people, animals, and objects.
 - b. Keep the risk zone clear of any flammable objects/materials, unauthorized personnel and animals.

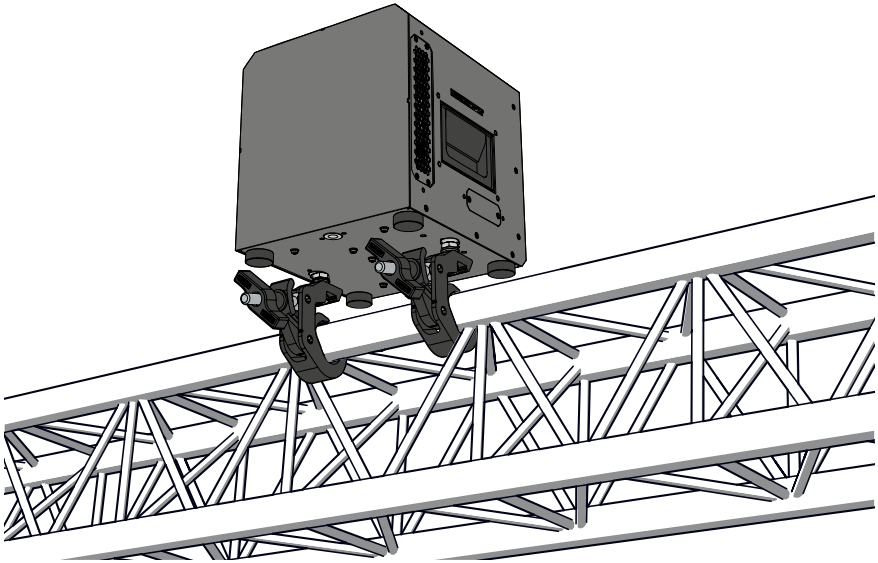
3.2 MOUNT ON A TRUSS

This chapter describes the 100 kg Doughty Quick Trigger Clamps (MFX3104) as an example. The 100 kg Doughty Half Couplers (MFX3106) follow a similar process.

1. Attach the clamps (MFX3104 or MFX3106) to the M10 mounting holes on the bottom side of the SPARXTAR® II with the provided bolts.



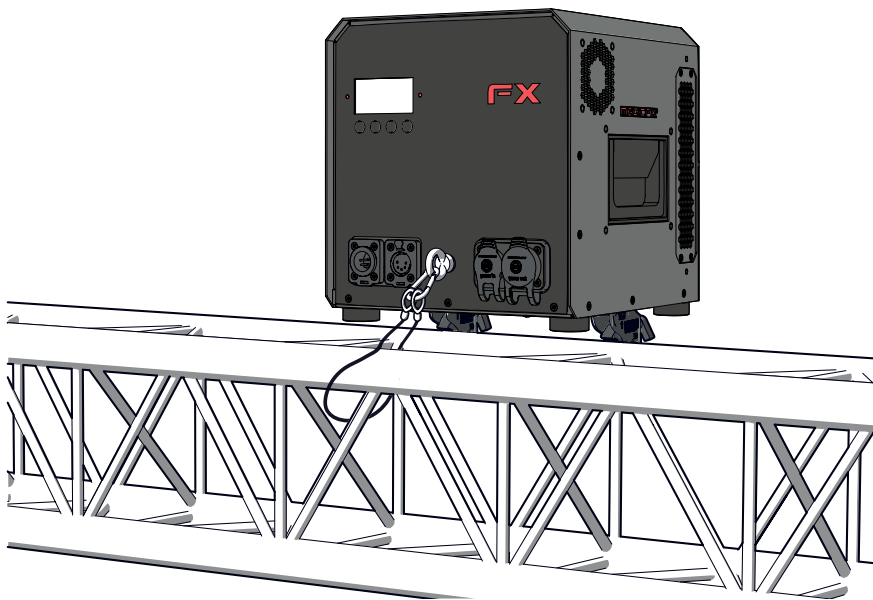
2. Mount the SPARXTAR® II in a horizontal position onto a horizontal truss. Vertical truss mounting is not permitted.
-



3. Secure the SPARXTAR® II onto the truss with use of a safety wire. Make sure the safety wire is as short as possible. If needed, wind the cable around the truss.
-

⚠ CAUTION

The safety steel and the emergency link need to have a minimal workload of 10 kg.



4. Inspect if the SPARXTAR® II is mounted firmly and secured correctly.
5. Inspect the machine and remove any foreign objects and material that will block or obscure the output pipe or the air inlets of the machine during operation.
6. Take the necessary safety precautions, including defining the risk zones around the output pipe of the SPARXTAR® II:
 - a. Keep the danger zone clear of any people, animals, and objects.
 - b. Keep the risk zone clear of any flammable objects/materials, unauthorized personnel and animals.

3.3 (RE)FILL THE HOPPER

⚠ WARNING

Before entering the hazardous zone, verify that the machine is disabled by confirming that the FX LED is off.

⚠ WARNING

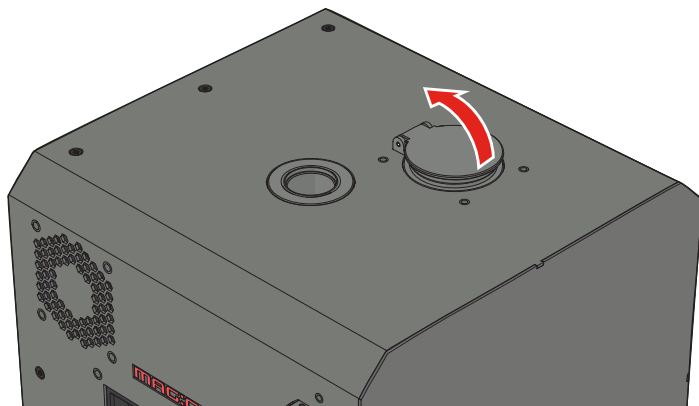
Eye contact with flying sparks and hot particles from the machine can lead to serious eye injury. Always wear safety goggles when you enter the hazardous zone.

⚠ CAUTION

The output pipe heats up during operation and causes burns when touched. Do not touch the output pipe of a (recently) powered machine.

1. Make sure there are no nearby ignition sources, such as active SPARXTAR® II units.

2. Open the lid of the hopper.

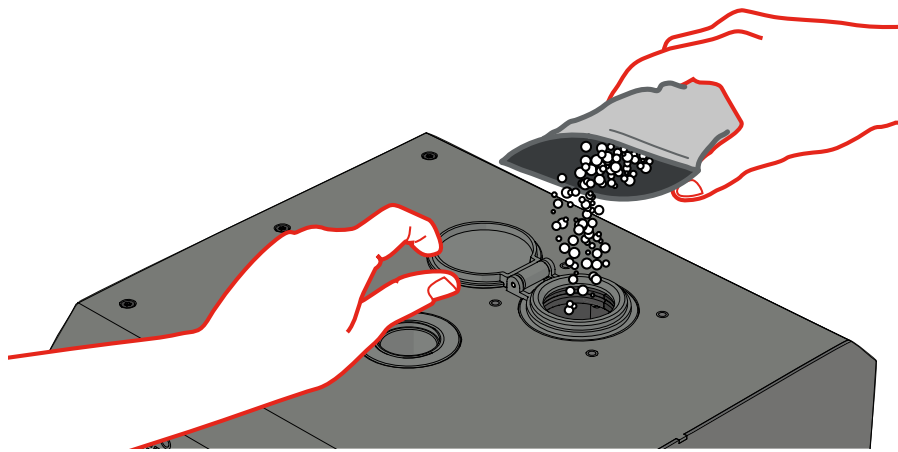
**NOTICE**

Make sure that the hopper interior is dry and free from foreign material at all times. Do not use the machine when the hopper interior and/or powder is wet. Remove any moist and/or clumped powder. Remove any foreign material.

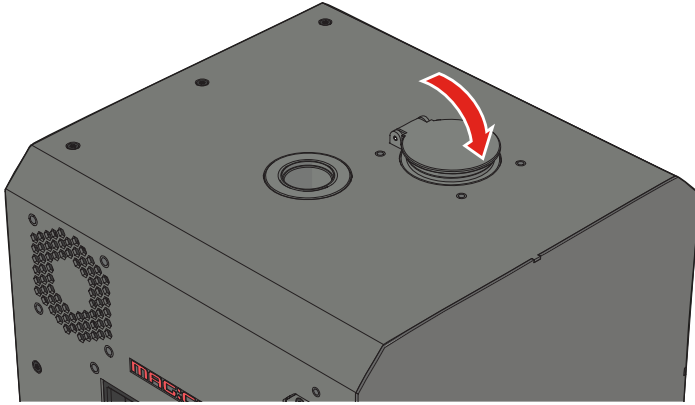
NOTICE

If the machine is cold, allow the machine to warm up before adding SPARXTAR® powder to prevent clumping caused by condensation.

3. Open the powder bag(s) and fill the hopper with powder (maximum 150 grams).



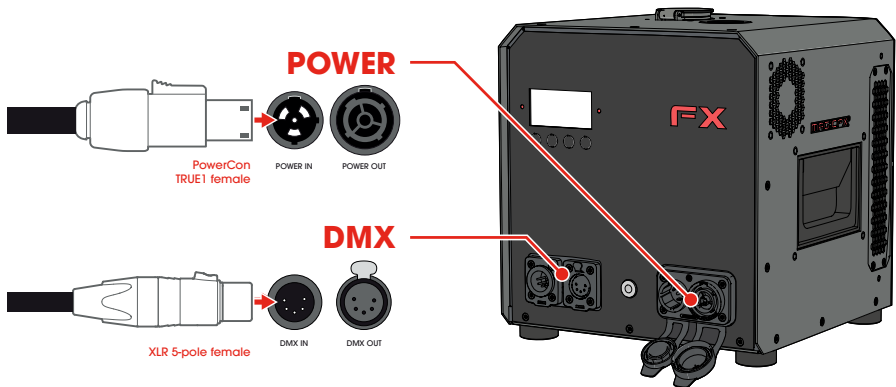
4. Make sure the hopper lid is fully closed



⚠ WARNING

Never use the machine if the lid is broken or not properly closed. Falling sparks may ignite the SPARXTAR® powder in the hopper, leading to a fire hazard.

3.4 CONNECT THE MACHINE



1. Connect a power cable with a PowerCon TRUE1 female connector to the power input.
2. Connect the other end of the power cable to a 210-240Vac (50-60Hz) power source. The machine starts heating.
3. Connect the female connector of a 5-pole DMX cable in the DMX input.

4. Connect the other end of the DMX cable to your DMX controller.
5. Use the display and buttons or a RDM controller to assign DMX addresses, see Chapter 1.

NOTICE

Always plug in a DMX Terminator into the DMX output of the final unit in the control sequence. Using a DMX Terminator improves signal reliability.

3.5 HEAT UP

The machine starts heating automatically when connected to a power source. The heating cycle takes approximately 12 minutes. The heating process is visualised on the display with a progress bar.

The heater of the SPARXTAR® II can be switched off. Switching off the heater during extended periods of inactivity reduces power consumption and extends the machine's service life.

The heater can be controlled using different methods: via the menu, DMX, or RDM. The last input determines the current setting of the heater.

If the heater is switched off using one method, it can be switched on again using any other method.

RDM control is available via parameter RDM_PID_HEATER_ENABLE (see Chapter 1.8).

3.5.1 SWITCH OFF THE HEATER

To switch off the heater via the menu:

1. Navigate in the menu to Configuration -> Heater.
2. Set the heater to OFF.

To switch off the heater via DMX:

1. Ensure that the DMX Personality is set to Extended Mode (see Chapter 1.6.2).
2. Set Start Address + 2 to a value between 95-134 for a minimum of 3 seconds.

3.5.2 SWITCH ON THE HEATER

To switch on the heater via the menu:

1. Navigate in the menu to Configuration -> Heater.
2. Set the heater to ON.

To switch on the heater via DMX:

1. Ensure that the DMX Personality is set to Extended Mode (see Chapter 1.6.2).
2. Set Start Address + 2 to a value between 215-255 for a minimum of 3 seconds.

3.6 SPARK WITH DMX

To start the sparks:

Instructions	DMX Values
1. Power the machine.	
2. Set the DMX value for the effect Height . The effect height scales proportionally. The maximum height is limited by the Height Limit.	Start address + 1: 0 - 255
3. Make sure the prescribed risk zone is clear of all obstructions, as described in Section 2.7.	
4. Enable the SPARXTAR® II via the enable address.	Enable address: 100 - 154
5. When it's showtime, activate the effect by setting the effect Trigger value.	Start address: 200 - 255
6. If desired, adjust the effect Height value during the effect. The effect scales proportionally.	Start address + 1: 0 - 255
7. Enjoy the view!	
8. To stop the effect, set the effect Trigger value to 0.	Start address: 0
9. If the machine is not used immediately afterwards, disable the SPARXTAR® II by setting the DMX value for the enable address to 0.	Enable address: 0
10. When the show is over, the machine must be cleaned before transport and storage. Clean the machine as described in Chapter 3.7.	
NOTICE	The maximum continuous duration of the effect is 60 seconds. After this period, the effect will stop automatically. To restart the effect, toggle the Trigger channel off and on.

3.7 CLEAN UP

After use, the SPARXTAR® II must be cleaned. Cleaning is essential to maintain the longevity, performance, and reliability of the machine. Any excess SPARXTAR® powder left inside the machine can react with moisture during transport or storage. This can lead to clogging during the next use, affecting the functionality of the machine.

To clean the machine properly, all powder must be removed from the machine. This is done in two steps:

Remove the powder from the hopper by turning the machine upside down. Remove any remaining internal powder using one of the two available cleaning modes.

The available cleaning modes are Cleaning Mode and Cold Cleaning Mode. Make sure to follow the safety precautions described in chapter 2. when using the cleaning modes.

- Cleaning Mode: can be triggered via DMX when the heater is hot. The machine will blow out burning sparks.
- Cold Cleaning Mode: can be triggered via the menu when the machine is cold (<55% heating). The machine blows out powder but does not produce sparks.

⚠ WARNING

Always follow the safety instructions from the powder packaging when handling and working with the powder. Consult the MSDS from our website for detailed safety instructions.

3.7.1 CLEANING MODE

⚠ WARNING

During cleaning mode, the SPARXTAR® II blows out hot flying particles. Wear safety goggles. Ensure that unauthorized personnel and animals are kept out of the hazardous zone during operation.

To start the cleaning mode:

1. Ensure that all DMX values are set to 0.
2. Set the value at the enable address to a value between 200 and 255 to enable Cleaning Mode.
3. Set the value at the start address between 100 and 154 to start the cleaning cycle.
The FX LED blinks slowly to indicate that the cleaning mode is enabled.
The machine waits 3 seconds before the cleaning cycle starts.
After 3 seconds, the SPARXTAR® II starts blowing out hot excess powder from the output. The cleaning cycle stops automatically after 10 seconds.
4. Set the start address value to 0.
5. Set the enable address value to 0 to disable the machine.

⚠ WARNING

During cold cleaning mode, the SPARXTAR® II blows out flying particles. Wear safety goggles. Ensure that unauthorized personnel and animals are kept out of the hazardous zone during operation.

To start the cold cleaning mode:

1. Ensure that the machine is disabled if the machine is connected to DMX.
2. Confirm that the heating level is below 55%.
3. In the menu, navigate to Configuration -> Cold Cleaning Mode and switch on Cold Cleaning Mode.

The FX LED blinks slowly to indicate that the cleaning mode is enabled.

The machine waits 3 seconds before the cleaning cycle starts.

4. Immediately step out of the hazardous zone. Exit the hazardous zone within 3 seconds.

After 3 seconds, the SPARXTAR® II starts blowing out excess powder from the output. The cleaning cycle stops automatically after 10 seconds.

The machine is automatically disabled after the cold cleaning cycle is finished.

4. TROUBLESHOOTING

In case the display shows one of the following error/alarm or warning codes, act accordingly:

Code	Meaning	Solution
000	Software update error	If the error appears during or after a software update, try re-uploading the software. If it still doesn't work, contact MAGIC FX.
010	Heat-up error	Contact MAGIC FX.
022	Hopper motor unexpectedly stops working.	Contact MAGIC FX.
023	Spindle motor unexpectedly stops working.	Open the service lid (see picture) and loosen the gear when necessary. Follow the steps described in section 4.1 If it happens again, contact MAGIC FX.
024	Fan unexpectedly stops working.	Disable the machine. Wait 10 minutes: the fan could be in overheat lock. If it still doesn't work, contact MAGIC FX.
025	Thermocouple error	Contact MAGIC FX.
027	Cooling fan error	Contact MAGIC FX.
028	Self-test error	Contact MAGIC FX.
100	DMX address conflict	Change either the DMX safety or the DMX start address.
120	Heater overheat error.	Contact MAGIC FX.
121	Device tilt orientation exceeds safety limit.	Keep the device within previously described safe bounds.
208	Temperature overheat warning	Make sure the device is used within its operating temperature.
213	Heater off warning.	This warning is displayed when the user disabled the heater.

Troubleshooting

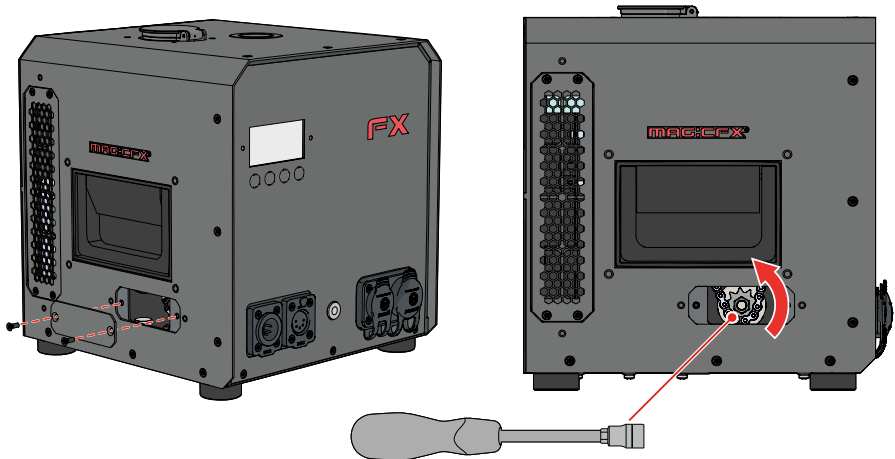
Always contact MAGIC FX if any malfunctions or errors occur that cannot be solved with the instructions as described in this manual.

4.1 LOOSEN SPINDLE MOTOR

Situations such as moisture in the machine and transporting the machine with powder in the hopper can lead to clogging. This issue can be resolved easily by hand.

Make sure the machine is not powered. Then, access the gear by removing the service lid (see picture). Rotate the gear using a 10 mm socket. Wiggle the gear until it becomes loose, then rotate it to the left to push out the powder. Screw the lid back on before turning the machine on again.

Cleaning Mode or Cold Cleaning Mode can be used to check whether the problem is resolved. The SPARXTAR® II always checks whether the system is clog-free. If not, error 023 is displayed.



⚠ WARNING

Rotating parts behind the service lid can cause injury to fingers and other body parts. Do not power the machine while the service lid is removed, and disconnect the power before opening the service lid.

5. MAINTENANCE

To achieve the maximum service life of the SPARXTAR® II you must follow the inspection and maintenance procedures described in this chapter.

Contact MAGIC FX if the SPARXTAR® II is not functioning correctly.

DANGER

Do not replace parts yourself. Improper maintenance can cause damage to the machine.

5.1 INSPECTION AND MAINTENANCE

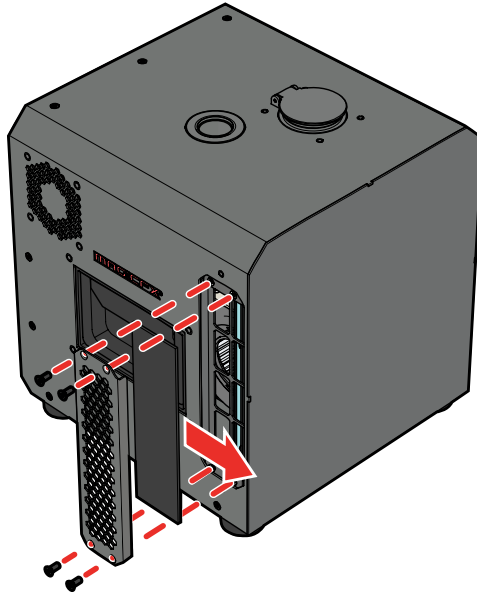
Inspect and maintain the SPARXTAR® II at the intervals listed below and take action if necessary.

The effect time can be found in the main menu: Menu -> Information -> Effect time.

Interval	Action required
Before every use	• Visually inspect air filters for dust or debris buildup. Clean if necessary. • Remove any blockages or accumulated contamination • Inspect the output pipe and remove any debris or foreign objects • Do not operate the machine if any components are damaged or not functioning properly
After every use	• Use cleaning mode (see Chapter 3.7)
Before transport	• Remove any remaining powder from the hopper.
Every 240 hours (10 days) up-time Or every 2 months (see Chapter 1.7)	• Clean the air filters (see Chapter 5.2)

5.2 CLEAN THE AIR FILTER

1. Unplug the machine from the power source.
 2. Remove the air grille using a T10 Torx screwdriver.
 3. Remove the air filter from the air grille.
-



4. Clean the filter by vacuuming it or washing it with water. Allow the filter to dry completely.
5. Place the filter back in the air grille.
6. Re-attach the air grille using a T10 Torx screwdriver.

6. WARRANTY

For the applicable warranty terms and conditions, including the warranty period, covered defects and exclusions, please refer to the General Terms and Conditions of Sale of MAGIC FX B.V., which are provided with your invoice and available upon request. The General Terms and Conditions govern all warranty rights and obligations with respect to this product.

The components listed below are subject to above-average wear and tear due to their function and may therefore wear out within the standard warranty period. Wear and tear of these components is not covered under the standard warranty:

- Heater Assembly, including the heater housing, heater wire, heater spindle housing, and heater spindle. Coverage is limited to 1000 minutes of effect time.
- Air Filters

7. CORRECT DISPOSAL



This symbol on the product and / or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product to designated collection points where it will be accepted free of charge.

Alternatively, in some countries you may be able to return your products to your local retailer upon purchase of an equivalent new product. Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, in accordance with your national legislation.

8. EC DECLARATION OF CONFORMITY

According to Annex III A Machinery Directive 2006/42/EC

MAGIC FX B.V. declares as manufacturer and composer of the technical construction file that the product with the following specifications:

Name machine	: SPARXTAR® II
Type	: MFX5003
Voltage	: 210-240 VAC 50/60 Hz
Serial number	: on product
Year of construction	: on product

Is in conformity with the minimal safety regulations as stated in the following directive(s):

- LVD (2014/35/EU) Low Voltage Directive
- EMC (2014/30/EC) ElectroMagnetic Compatibility
- RoHS (2011/65/EU) Restriction of the use of certain Hazardous Substances
- WEEE (2012/19/EU) Waste Electrical & Electronic Equipment

The following harmonized standards were applied:

- NEN-EN-IEC 62368-1:2020 Audio/video, information and communication technology equipment - Part 1: Safety requirements
- NEN-EN-IEC 61000-6-1:2007 Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments
- NEN-EN-IEC 61000-6-3:2007/A1:2011, Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments.

- ☐ Original declaration of conformity
- ☒ Translation of the original declaration of conformity

Name manufacturer	: MAGIC FX B.V.
Address	: Schouwrooij 27, 5281 RE BOXTEL
Country	: The Netherlands
CEO	: B. Veroude
Date	: 27-3-2025
Signature	



MAG:CFX[®]

WWW.MAGICFX.COM

