

SPARK GERB

SF-J10

USER MANUAL



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DISCLAIMER

Please read the manual carefully before installing and using this product. Failure to read or comply with this manual may result in injury to products and personnel, and Spark Fabrica will not be responsible for this.

This product is a professional machine, we do not assume any responsibility for accidents or losses caused by the use or maintenance of this product by personnel without professional training and permission.

If the information contained in the manual or the product specifications are changed, Spark Fabrica will not inform you further and responsible for any errors or omissions.

Our company reserves the right to modify the user manual at any time.

PREFACE

This manual includes warning, caution and notice concerning the safe operation of equipment. These warning, caution and notice come with the following icons. Please read them carefully!

WARNING

This warning indicates a dangerous situation that may result in death or serious injury if not avoided.

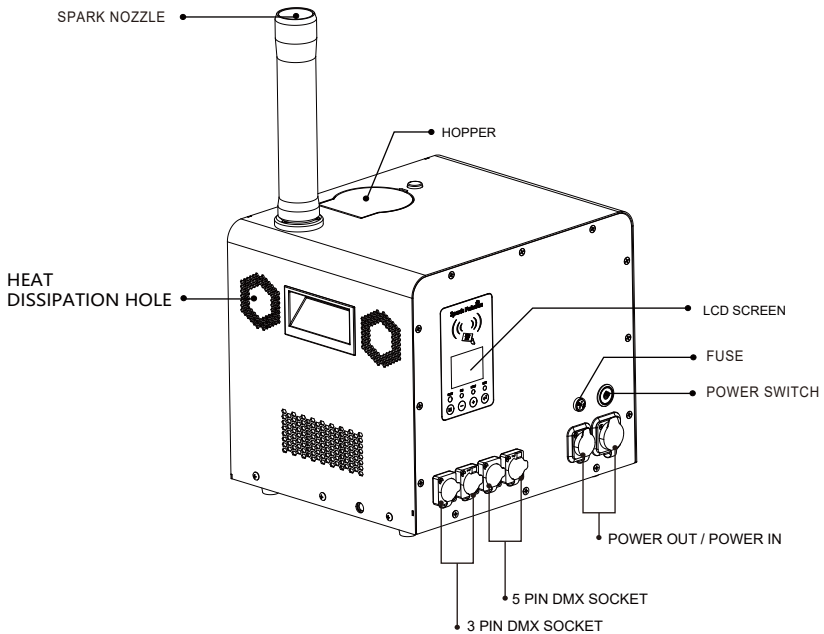
NOTICE

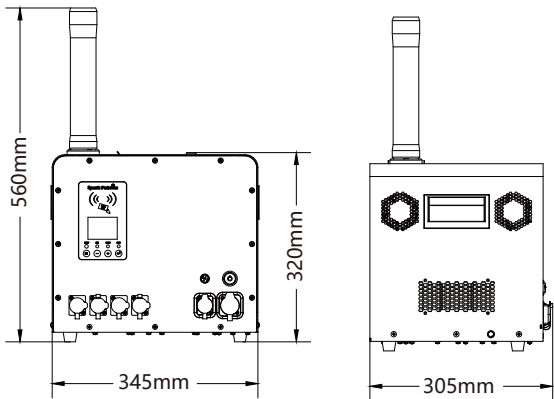
This means that you need to be careful.

1 PRODUCT INTRODUCTION

Spark Gerb SF-J10 is a newly developed stage fx device, which can produce 7M & 10M high instant spark effect, which greatly simulates the traditional fireworks gerb effect.

1.1 PRODUCT OVERVIEW





1.2 PRODUCT ACCESSORIES

1.6 Meter Power Plug or 3 Meters Power Pair Cable
3 Meters DMX Pair Cable
User Manual

NOTICE

Open the package carefully and check to make sure the goods are in good condition.

1.3 SPARK FABRICA GRANULE

A special metal powder has high content, low residue characteristics, belonging to special consumables with no smoke, odour and other toxic gas when sparking.

WARNING

Only the consumables provided by Spark Fabrica are allowed to be used. Spark Fabrica shall not be liable for any damage to machines, personnel and property caused by the use of consumables not provided by the company.

2 TECHNICAL PARAMETER

Identification	Manufacturer	Spark Fabrica
	Name	Spark Gerb
Ac Power	Input Voltage &frequency	AC 100-120V , 60HZ AC 220-240V , 50HZ
	Current Limiter Specifications	6.3A,100-120V , 6.3A,200-240V
	Nominal Total Power Consumption	700W
Technical Parameters	Dmx Signal Interface	3PIN / 5PIN
	Heating	15min
	Hopper Capacity	340g
	Height	7m/10m
	Powder Consumption (100% Output)	11-13g/shot
	Inflation Time	13s/18s
	Low-end Delay Time	1.5s
	High-end Delay Time	2.5s
Control	Control Protocol	Dmx-512
	Rfid	√
Accessory	Power Plug	1.6m
	Dmx Cable	3m
	Power Cable	3m
	Safety Rope	√
	Safety Loop	Optional
	Bottom Mounting Screw	×
	Software Upgrade Box	Optional
	120ohms Terminal Resistance	Optional
Certificates	Ce	√
	Rohs	√
Weight	Net Weight	18.5kg
	Gross Weight (2 unit flight case)	56.5kg
Demension	Machine Dimensions -l*w*h	345mm*305mm*320mm
	Size of 2 unit flight case size-l*w*h	850mm*460mm*520mm
Granule	Granule	L Size Granule

3 PRECAUTIONS FOR OPERATION

Please read the following precautions carefully before operating this machine.

3.1 ENVIRONMENTAL REQUIREMENTS

⚠ WARNING Do not mount the product on flammable surfaces (linoleum, carpet, wood, paper, cardboard, plastic, etc.)

⚠ WARNING Keep people or flammable materials at least 10 feet (3 meters) away from the machine and make sure that residue does not fall on flammable items.

⚠ WARNING Operate the device only in an ambient temperature between 0°C (32°F) - 50°C (122°F).

3.2 SAFETY TIPS

NOTICE

Make sure to connect the ground wire properly to avoid electric shock.

NOTICE

Do not immerse the machine in water. Do not touch sparks.

NOTICE

Noise level of the operation of the spark machine is 80 db (at the point closest to the machine).

NOTICE

Do not touch the machine casing while heating or operating the machine.

NOTICE

The temperature of the product is quite high during operation and remains high for a long time after operation. It is strictly forbidden to put your fingers into the nozzle.

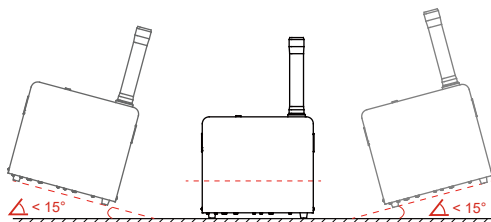
NOTICE

Suitable fire extinguishers are as follows:

- 1.Any items similar to sand or soil can be used to cover and put out the fire.
- 2.Please use Class D Fire extinguishers for metal materials on fire.

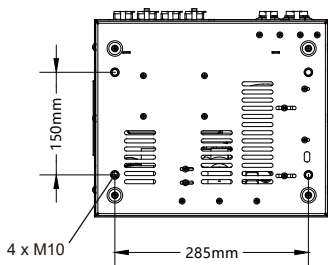
4 OPERATE THE MACHINE

Place machines on a firm and level ground, with a recommended maximum tilt angle of 15 degrees or less.



4.1 INSTALL MACHINE

Install the product on truss by using the attached accessories

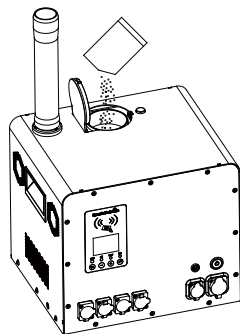


4.2 ADD CONSUMABLES

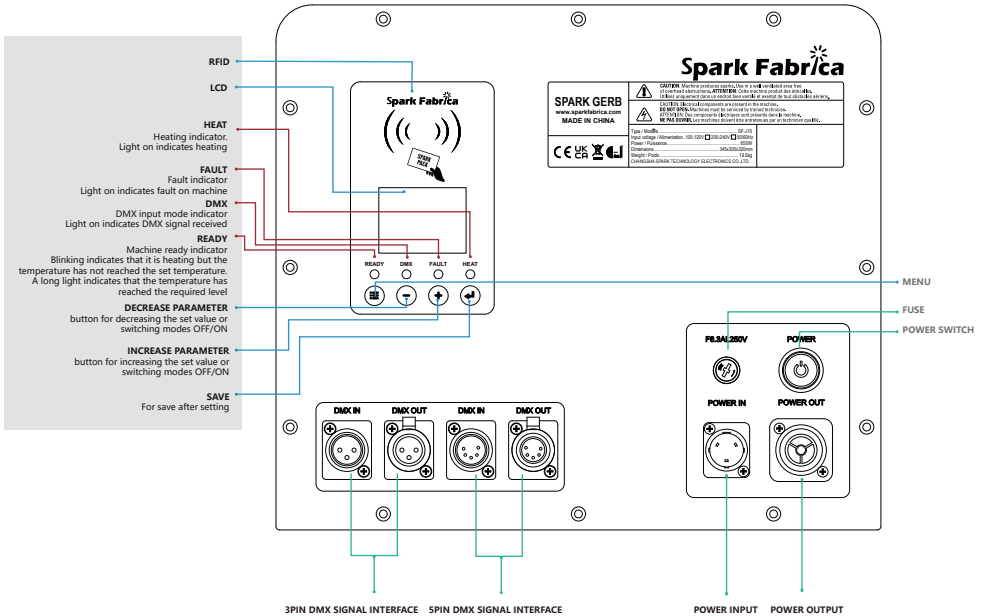
Spark Fabrica Granule is the consumable specially designed for spark machine, to simulate cold fountain fireworks effect for stage.

Tear the vacuum package of granule, and fill in the Spark Fabrica Granule through the granule filling port on the top of the machine.

*Close the lid securely after filling.*The capacity of Hopper is 340g.



5 PANEL INTRODUCTION



6 CONNECTION OF MACHINE

Connection of Power and DMX Signal Cables

*Connect the first unit to the power plug.

*Connect other machines with power link cables.

*Connect other machines with DMX signal cables.

*Connect with PYRO SIM CONTROLLER or console DMX512 .

NOTICE

Do not use damaged power plugs and power cords.

NOTICE

Up to 8 machines can be connected in series with a single power plug for this product.

NOTICE

When connecting multiple power cords in series on a rainy day, please wrap the connections with a tarpaulin to avoid electrical leakage.

7 MACHINE SETTING

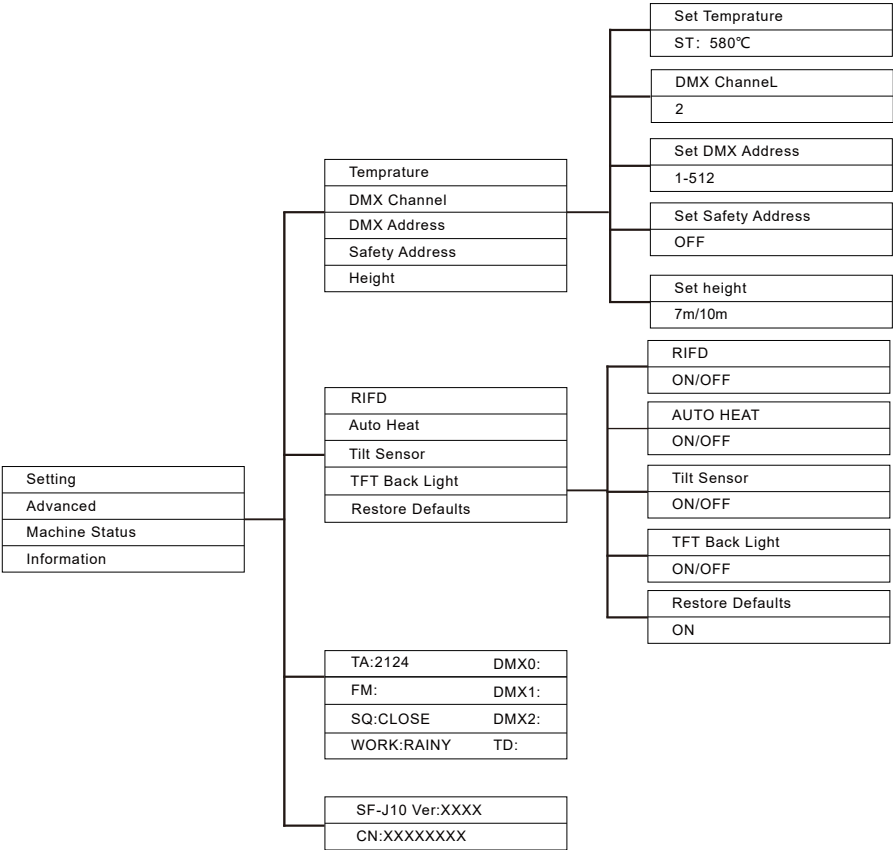
- Turn on the power
- The machine automatically heats up and pressurizes, the heating time is about 15 min.
- Check the machine status icon (refer to 7.2 for icon description)
- Set the address code for each machine, the address code cannot be repeated.



WARNING

The automatic heating function can be set to on or off, please refer to 7.1 for details. When the machine's automatic heating is off, the machine will only turn on the heating when the DMX signal is connected and the heating function of the second channel is turned on.

7.1 MENU SETTING



7.2 STATUS ICONS



	Blower Motor		Chip Temperature
	Shaft Motor		Tilt Sensor
	Hopper Motor		PCB Temperature
TS	Temp. Sensor	2	2 Channel Mode
	Time Remaining		

NOTICE

When the icons are all green, it indicates normal operation and when the icons are yellow, it indicates an abnormality.

7.3 RFID TIME CARD

In order to avoid machine failure or other safety accidents caused by bad-qualified consumables, this product can only be used with special RFID time card.

NOTICE

Each swipe of the card can be recharged for 12 minutes, and each machine can swipe up to 2 time cards for 24 minutes at most. The card can only be swiped again when the remaining time is less than 20 minutes.

NOTICE

If the customer breaks the card swiping function or cancels the card swiping function at the customer's request, no quality guarantee and after-sales service will be provided by Spark Fabrica. Spark Fabrica shall not be liable for any accidents and losses about this.

8 CONSOLE CONTROL

NOTICE

When heating is turned on, the HEAT indicator on the machine will light up red while the READY indicator flashes green to indicate that the machine is heating.

NOTICE

When the READY indicator turns always green, it means that the heating is complete and the machine enters the state to spray.

NOTICE

When using our profesional spark machine console, the screen will display the real-time temperature of each machine, when the temperature value of the console turns green, it means that the heating is completed and the machine enters the state of being able to spray .

NOTICE

Do Not put finger in the output nozzle.

8.1 DMX PARAMETER LIST

FIRST CHANNEL	FUNCTION
0~10	Stop Spark
11~255	Spark
SECOND CHANNEL	FUNCTION
0-200	Heat Off
56~200	Clear Material
240~255	Heat On

8.2 SPRAYING SPARK

Adjust the value of the Channel 1 to spray

NOTICE

After each spraying is completed, you need to push the first channel back to the value 0-10 to stop, and wait for about 15S to automatically inflate the machine, and only after the inflation is completed can do the next spraying.

NOTICE

The reaction time for controlling the machine's low-grade spraying is 1.5S.
The reaction time for controlling the machine's high-grade spraying is 2.5S.

NOTICE

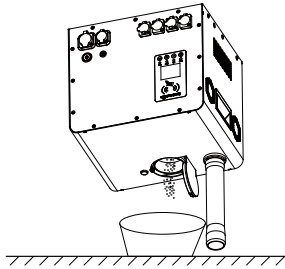
When switching to high grade, the internal pressure of the machine will not change, but the height of the spray effect will change.

8.3 CLEARING MATERIAL

This product has the function of clearing material, adjusting the second channel parameters, you can clean all the consumables inside the machine so that there is no risk of jamming material.

8.4 POWERING DOWN AND CLEANING THE MACHINE

After each performance, need to clean the machine in order to extend the life of the machine, and to prevent the risk of consumables jamming due to moisture inside the machine. To clear the consumables inside the hopper, you can pour the consumables directly from the hopper, and preserve the consumables well.

**⚠ WARNING**

Put the unused consumables into the vacuum packing bag and seal it well. Place in a cool, dry place, away from moisture, heat, high temperature, open flame and other sources of ignition.

⚠ WARNING

When pouring out consumables, wait for the machine to cool down or use gloves, do not touch the casing of the hopper to avoid burns.

⚠ WARNING

Be sure to wipe dry the surface of the machine when taking the hopper on rainy days to avoid rainwater entering the hopper and causing lumps and jams.

⚠ WARNING

Please do not pull the power cord to disconnect the power, in order to avoid unnecessary wear and tear of the machine, to improve the service life of the machine, during the period of non-use, please unplug and disconnect the power.

9 MACHINE MAINTENANCE

Some steps are needed in order to clean and maintain the product for maximum usage. The recommended procedure is as follows; After a period of using, check if there is any consumable accretion inside the nozzle. Do necessary cleaning up if there has some. or it may affect spark performance, even damage the machine. Please test your machine once a month to maintain optimal performance.

10 FAILURE HANDLING

ERROR CODE	DESCRIPTION	SOLUTION
System Error E0	System error:	Stop operation and report the error
E2 Temp Sensor Unconnected	Temperature sensor disconnected	Stop operation and report the error
E3 PCB Too Hot	Main board too hot	Stop operation and report the error
E4 Time Remain	Running out of consumables or insufficient time remaining	Stop operation and report the error
E5 Temp OverHeat	Heating protection due to over-temperature.	Stop operating machine until temperature return to normal.Alert will clear off automatically
E6 Heat Fail	Heating process fail	Stop operation and report the error
E7 Tip Over E7	Tip over alert	Stop operation. The alert will clear off automatically after put the machine back to normal position.
Illegal Card	Illegal card	Use illegal or copy RFID card will lock the machine. If so ,seller will stop providing warranty and after sale service . To unlock the machine,please contact seller.
Machine Locked	Machine locked	Use illegal or copy RFID card will lock the machine. If so ,seller will stop providing warranty and after sale service . To unlock the machine,please contact seller.

*Invoice and warranty card are necessary when applying for maintenance service from SPARK FABRICA.

WARRANTY CARD

Product Name:		Serial No.:	
Purchase Date:			
Tel:			
Address:			
Info.Feedback About The Problem:			
Actual Problem:			
Maintenance Detail:			
Service Engineer:		Service Date:	



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