

V-6 SPARK SPIN

USER MANUAL

GUANGZHOU DJPOWER ELECTRONIC TECHNOLOGY CO., LTD

1 BEFORE YOU BEGIN

1.1 What Is Included



V-6 Spark Spin





Power Cord





User Manual



Warranty Card

Spark Seed Filling Funnel

Spark Seed Recycling Tube

1.2 Unpacking Instructions

Carefully unpack the product immediately and check the container to make sure all the parts are in the package and are in good condition.

If the box or the contents (the product and included accessories) appear damaged from shipping, or show signs of mishandling, notify the carrier or dealer/seller immediately. In addition, keep the box and contents for inspection.

1.3 Symbols

Symbol	Meaning
A	Caution
<u> </u>	Critical installation, configuration, or operation information. Not following these instructions may make the product not work, cause damage to the product, or cause harm to the operator.
0	Important
(i)	Important installation or configuration information. Failure to comply with this information may keep the product from working correctly.
\odot	Information
	Useful information.

1.4 Disclaimer

The information and specifications contained in this User Manual are subject to change without notice. DJPOWER assumes no responsibility or liability for any errors or omissions and reserves the right to revise or to create this manual at any time.Copyright © 2022 DJPOWER. All rights reserved.

1.5 Safety Notes

Please read the following Safety Notes carefully before working with the product. The notes include important safety information about installation, usage, and maintenance.

1.5.1 Personal Safety

- Always connect the product to a grounded circuit to avoid the risk of electrocution.
- Do not touch the casing of the machine during operation as it may be very hot.
- The machine spout is very hot during operation, do not touch it.
- The minimum safe distance between people and flammable objects is 3 meters from the machine. The light spot of the spray can only be in the air, can't touch anything, and pay attention to the spray residue.
- Make sure that children do not obtain access to the machine.
- Protect your eyes when working near the machine.

1.5.2 Mounting and Rigging

- When using outdoors, for best effects, please place it away from wet ground.
- For safety reasons, we do not recommend other installation methods, please install and operate the machine in a flat position.
- When transferring product from extreme temperature environments, (e.g. cold truck to arm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow product to fully acclimate to the surrounding environment before connecting it to power. Please make sure that there are no flammable materials around the product during operation.
- Do not mount the product on a flammable surface (linoleum, carpet, wood, paper, carton, plastic, etc.)
- Do not use in a confined space. Always install the product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Be sure that no ventilation slots on the product's housing are blocked.

1.5.3 Power and Wiring

- Always make sure that the voltage of the outlet to which you are connecting the product is within the range stated on the decal or rear panel of the product.
- Make sure the power cord is not crimped or damaged.
- Never connect this product to a dimmer pack or rheostat.
- Never disconnect the product from power cord by pulling or tugging on the cord.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it

1.5.4 Operation

- Do not operate this product if you see damage to the housing or cables. Have the damaged parts replaced by an authorized technician at once.
- Make sure there are no flammable materials close to this product while it is operating.
- Do not cover or plug the output nozzle during operation.

- Do not use the product as a space heater.
- Never carry the product by the power cord or any moving part. Always use the handles.
- Empty the storage bin before transporting the product.
- The maximum ambient temperature (Ta) is 104 °F (40 °C). Do not operate the product at higher temperatures.
- Before and after the machine is used, the cleaning consumables function should be used to remove the remaining material from the machine. After the machine is used, it should be observed whether there are nodules in the spray mouth, If there is, it needs to be cleaned up, the nodules will affect the spray effect and even damage the machine.
- Always disconnect the product from the power source before cleaning.
- This product contains no user-serviceable parts. Any reference to servicing in this User Manual will only apply to properly trained, certified technicians. Do not open the housing or attempt any repairs which can lead to damage or malfunction.
- In the event of a serious operating problem, stop using the product immediately.
- Use only DJPOWER Spark Seed PRO-K.



Keep this User Manual for future use. If you sell the product, be sure that the purchaser receives this document.

2 INTRODUCTION

2.1 Description

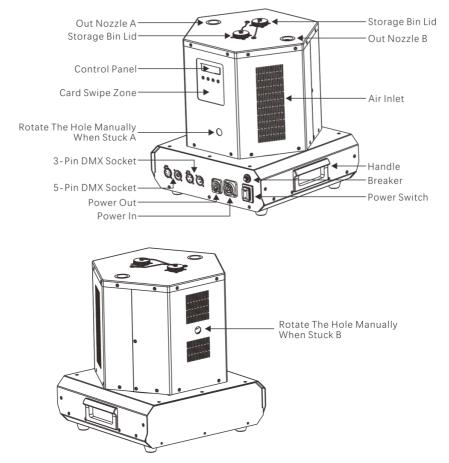
The rotating dual-head spark machine adopts a dual-head layout, which can rotate the body at will, and the two spark jets are intertwined, which is interesting and eye-catching. Adjustable rotation direction, rotation speed, spray height, bring more dazzling visual effects to the stage.

2.2 Features

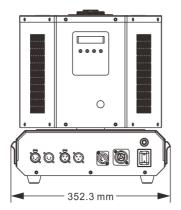
- Dual head rotation, free direction change;
- Adjustable rotation direction, rotation speed, spray height;
- 20° angle between the two nozzles make the spray effect is intertwined and interesting;
- Can design and program a variety of spark effects;
- DMX Channel2/Channel4 control mode;

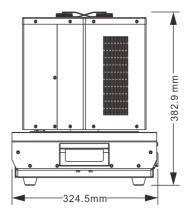
Note: The actual effect may be affected by the use environment..

2.3 Product Overview



2.4 Product Dimensions





3 TECHNICAL SPECIFICATIONS

Idontification	Category	Spark Spin	
Identification	Model	V-6	
	Input Voltage & Rate	AC 220-240 V, 50/60 Hz	
	Current Limiter Specifications	8A, 250 V	
AC Power	Current Limiter Type	Breaker	
	Nominal Total Power Consumption	1,150 W	
	Power Input/Output Connector	Lockable PowerCon	
Heating	Heat Up Time	Appr.3 min	
Capacity	Powder Tank Capacity	200 g×2	
	Max Output Height	Appr.5 m	
0	Max Continuous Output Duration	Appr. 30 s	
Output	Powder Consumption	Appr.8g/min × 2	
	Consumable Type for Standard Output Test	PRO-K	
	Power Cord	\checkmark	
Accessory	Wireless Controller (Controller Model)	×	
	Wired Controller (Controller Model)	×	
	Horizontal	\checkmark	
	Inclined	×	
	Vertical	×	
Placement & Mounting	Hang Upside Down	×	
wounting	Rigging & Trussing	×	
	Rotating Nozzle	20° angle between the two nozzles	
	Deflector	×	
	On-device Manual Control	LCD Control Board	
	Wireless Control	×	
Control	Wired Control	×	
Control	Control Protocol	DMX-512	
	DMX Channel Range	2CH/4CH	
	RFID Card	\checkmark	
Cortification	CE	\checkmark	
Certification	RoHS	\checkmark	
	Net Weight	20.3 kg	
Weight &	Gross Weight	23.3 kg	
Dimensions	Machine Dimensions	352.3 × 324.5 × 382.9 mm	
	Packing Dimensions	412 × 402 × 408 mm	
Consumable	Consumable	Spark Seed PRO-K	

4 SETUP

4.1 AC Power

The machine has a fixed voltage power supply and can work with an input voltage of AC 220 V-240 V, 50/60 Hz.

To determine the product's power requirements (circuit breaker, power outlet, and wiring), use the current value listed on the label affixed to the product's back panel, or refer to the product's specifications chart. The listed current rating indicates the product's average current draw under normal conditions.



Always connect the product to a protected circuit (circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.



Never connect the product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.

4.2 AC Plug

The Spark Machine V-2 comes with a power input cord terminated with a Lockable Powercon connector on one end and an EU plug on the other end (EU & China market). If the power input cord that came with your product has no plug, or if you need the change the plug, use the table below to wire the new plug:

AC Live Black Brown	nection
	Live
AC Neutral White Blue	Neutral
AC Ground Green/Yellow Green/Yellow	Ground

4.3 Resetting the Breaker

This product is equipped with a resettable breaker. If the breaker trips, all sections of this product will lose power.

- Remove the power cord from mains power.
- Allow unit to cool for 15 minutes.
- After 15 minutes, you may attempt to reset the breaker by pressing the button with your finger.
- Plug the product's power cord into the power outlet and continue using as recommended.

4.4 DMX Linking

V-6 supports 3-pin or 5-pin connection to the DMX console, it can be connected to the same console with other DMX-supported devices and be controlled separately. This manual covers the operation connection and configuration of DMX.

4.5 Mounting

Before mounting the product, read and follow the safety recommendations indicated in the Safety Notes.

4.5.1 Orientation

For safety, it is recommended to install and operate this machine in a flat location with adequate ventilation, configuration and maintenance space.

4.5.2 Rigging

DJPOWER recommends using the following general guidelines when mounting this product.

- Before deciding on a location for the product, make sure there is easy access to the product for maintenance and programming purposes.
- Make sure that the structure or surface onto which you are mounting the product can support the product's weight (see the Technical Specifications).
- When mounting the product on the floor, make sure that the product and cables are away from people and vehicles

5 OPERATION

5.1 Preparing for Operation

- After checking that all the parts are intact and complete, position the machine on flat.
- Fill the consumable into feed port when power off.
- Always connect the product to a grounded circuit. Before power on, make sure it is connected with the rated voltage.
- Turn on the machine, it will immediately start heating up.

5.2 Preheating equipment

When the device is set to turn on the automatic heating function, after the device is powered on and not connected to DMX, the device automatically completes the heating. When the display shows "Heating Up", it means the equipment is not working, and when it shows "Ready to Spark", it means the equipment is warmed up and ready to work.

5.3 On-device Control Panel

To access the control panel functions, use the four buttons located underneath the LCD display.

Button	Function
<menu></menu>	Switch menu pages
	Add submenu
▼	Reduce submenu
<enter></enter>	Short press: return to the home page. Long press for 2 seconds to switch to the advanced interface

5.4 Device control mode and operation

5.4.1 Operation guide

- Refer to the Menu page for menu options, including the operator interface displayed and the values available for selection.
- Press the <MENU> key repeatedly to the page you want to set, until the parameter setting page appears. The value that appears on this page is the first value for this parameter.
- Press ▲ or ▼ to set or select a parameter value on the current page. If it exceeds the parameter range, you will see the first parameter or the set value.
- Press the <MENU> key repeatedly to switch sequentially between different menu pages.
- Press <ENTER> at any time to switch between the current menu page and the standby page

5.4.2 Menu Map

	Display	Description	Parameter Range
	Heating Up Temp 530	Shows the device is heating The current temperature of the spark heating system on the left and right sides	530°C -580°C
Standby Page	Ready To Spark Temp 580	The equipment preheating is completed. The current temperature of the spark heating system on the left and right sides	530°C - 580°C
		Show the device working status. The current temperature of the spark heating system on the left and right sides	530℃-580℃
DMX	Heating Up DMX Address 512	The equipment is heating under DMX control state. Heating, the current temperature, current pressure and delay time will cycle through the display.	
Configura tion Page	Ready To Spark DMX Address 512	The equipment preheating is completed under DMX control state	
	Spark On DMX Address 512	The equipment is working under DMX control state	
Menu Setup	Warm-Up ON/OFF	Automatic warm-up function When the machine's automatic heating mode is turned on, the machine will automatically complete the heating when it is powered on.	ON/OFF
-	Spark Test ON/OFF	Manual switch spark, only for testing, the machine will not rotate when spark.	ON/OFF

	Display	Description	Parameter Range
	Spark Height 10	Manual spark setting, for testing, can be set to 1-10 levels, 10 level is the highest.	
	DMX Address 512	DMX address setting, setting range 1-512.	1-512
	Spin Speed 60	Rotation speed setting, the setting range is 60-100RPM.	
		This parameter is only valid in DMX control channel 2 mode.	
	Remaining Time 5Min 20Sec	Check the remaining working time of the device.	
	key at the last option t	o exit the advanced settings and return to the	s the "ENTER" ne main menu.
Advanced	It will also return to operation.	o exit the advanced settings and return to the main menu page after 10 seconds with Equipment working temperature setting,	ne main menu.
Advanced Menu Settings	It will also return to operation. Temperature Set [450] 580	o exit the advanced settings and return to the main menu page after 10 seconds with Equipment working temperature setting, temperature setting range 530°C-630°C	ne main menu.
Menu	It will also return to operation.	o exit the advanced settings and return to the main menu page after 10 seconds with Equipment working temperature setting,	ne main menu.
Menu	It will also return to operation. Temperature Set [450] 580 DMX Mode	o exit the advanced settings and return to the main menu page after 10 seconds with Equipment working temperature setting, temperature setting range 530°C-630°C Channel2 and channel4 control mode selection settings under DMX working	ne main menu.

6 DEVICE WORKING MODE

6.1 Working Hours

When the equipment starts to work, the equipment can be spark for a maximum time of 30S once in a trouble-free state, If you want to spark the second time, you need to start the spark work again. With each shot, the remaining time of the device is accumulated When the remaining time is 0, an error E5 will be reported, and the card needs to be recharged.

6.2 Manual Mode

On the user menu page, there will be a "spark test" interface, which can be used to manually set the switch to test spark effect.

6.3 DMX Control Mode

The device has channel2 mode and channel4 mode, which can be set through the menu bar of the advanced page.

6.4 DMX channel function description

2 Channel Standard Mode

Channel	Value	Description		
	0-15	Spark Off		
	16-39	Low-grade spray, no rotation		
	40-63	Mid-range spray, no rotation		
	64-87	High-grade spray, no rotation		
1	88-111	Low-grade spray, turn clockwise		
T	112-135	Mid-range spray, turn clockwise		
	136-159	High-grade spray, turn clockwise		
	160-183	Low-grade spray, Anticlockwise rotation		
	184-207	Mid-range spray, Anticlockwise rotation		
	208-255	High-grade spray, Anticlockwise rotation		
	0-10	Preheat off (automatic preheat start, this function is invalid)		
2	20-40	emergency stop		
2	60-80	Clean consumable		
	240-255	Preheat on (automatic preheat start, this function is invalid)		

4 Channel Professional Mode

	Value	Description	
1	0-15	Nozzle 1 spray closed	
	16-255	Nozzle 1 spray opening, height adjust	
	0-10	Preheat off (automatic preheat start, this function is invalid)	
	20-40	Emergency stop	
2	60-80	Clean consumable	
	240-255	Preheat on (automatic preheat start, this function is invalid)	
3	0-15	Nozzle 2 spray closed	
	16-255	Nozzle 2 spray opening, height adjust	
4	0-15	Rotation stop	

 Value	Description	
 16-135	(60-100RPM)	Rotate clockwise, faster and faster
136-255	(60-100RPM)	Rotate clockwise, faster and faster

6.5 DMX address settings

When the DMX signal is connected, the menu will automatically jump to the "DMX Address XXX" page. Or press "MENU" to enter "DMX Address XXX" page, press "▲" or "▼" key to set the DMX address.

6.6 Scan card function

6.6.1 Recharge Instructions

Place the IC card in the induction area to recharge, and the display screen will display the current recharge time when the recharge is completed. The IC card will automatically become invalid after the recharge is completed.

6.6.2 Query remaining time

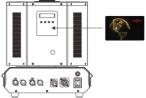
Press the "MENU" key to select the "Remaining Time" menu to check the remaining time. When the remaining time is 0, the device will display "time exhausted", report the error code "E5" and stop working, recharge can restore.

7 SPARK SEED

Spark Seed is the consumable specially designed for DJPOWER Spark Machine, to create light golden color cold firework for stage effect.

7.1 Identify & Activate Spark Seed

- Swipe the Consumable ID card that come with the Spark Seed to identify the consumables about to be filled into the fixture.
- When the LCD on the fixture shows the information of the Spark Seed after successfully swiping card, the identified Spark Seed could be filled into the fixture.
- Please keep the unscanned ID card and its associated spark seed. The ID card that is successfully scanned and identified card will be invalid immediately





Recharge instructions: Put the ID card in the scanning area of the machine to recharge, and the screen will display the current recharge time when the recharge is complete.Each card can be recharged 30 times. The ID card will automatically expire after the recharge is completed.

7.2 Fill in Spark Seed

Tear open the vacuum resealable foil pouch, and fill in the Spark Seed through the feed port on the top of the fixture depending on the dosage needed.



Consumable Feed Port & Storage Bin (Filling & Refilling Procedures)

- Open the feed bin cap.
- Fill the consumable into the feed port, <u>NOT</u> into the output nozzle when power off.
- Close the lid securely after filling.
- The capacity of storage bin is 200g.
- Only use DJPOWER consumable.

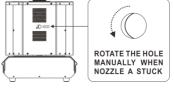
7.3 Step of cleaning powder stuck

When the machine is stucked, you can follow the prompts on the front of the machine to clean up the powder stuck.



Step of cleaning powder stuck

 When the machine is stucked, please use the manual rotation port for stucking and rotate it in the direction shown in the figure to clear the powder stuck.



7.4 Precaution for use

- The Spark Seed could be only filled in and used for the DJPOWER Spark Machine after successfully identified by swiping Consumable ID card.
- Make sure to fill the Spark Seed through the feed port on the top of the fixture and when power supply is off.
- Use Dry Chemical Extinguishers once lighting a fire. DO NOT use Water-Type Extinguishers, Foam Extinguishers or Carbon Dioxide Extinguishers.

8 TECHNICAL INFORMATION

8.1 Maintenance

The V-6 requires regular maintenance in order to maintain optimum performance. However, 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 tuberculation inside the nozzle. Do necessary cleaning up if there has some, or it may affect spark performance, even damage the machine.

Test-run your DJPOWER@ V-6 on a monthly basis to achieve the best performance.

8.2 Storage

8.2.1 Machine Storage

Before storing the machine, empty the storage bin, clean it as described in the "Maintenance" section. And keep the machine in dry cool place.





Empty the storage bin:

- Remove the power cord from mains power, and allow unit to cool down. Empty the storage bin through feed port by inverting the machine.
- Run the machine to generate Spark till out of Spark Seed, or run Consumable Cleaning Up procedure Safety channel(channel 2 or channel 4) to completely clear remaining Spark Seed inside the nozzle.



Refer to "DMX Channel Assignments and Values" chapter to for more information.

Spark Seed would easily get damp in the open air and deliver poor spark effect. Storing damp Spark Seed in the machine storage bin will do harm to machine and cause clogging.

8.2.2 Spark Seed Storage & Recycling

8.2.2.1 Sealed Spark Seed Storage

Spark Seed should be stored in a cool, dry place, vacuum packed in resealable foil bags, and protected from moisture, heat, hot surface, open fire and other ignition sources.

8.2.2.2 Spark Seed Recycling

Store the unfinished Spark Seed in the Recycling Tube with the Funnel. Keep it sealed and away from moisture.

8.3 General Troubleshooting

8.3.1 Device Error Description

When error happens, device will stop working and heating system shuts off automatically. LCD shows corresponding error code.

8.3.2 Device Error Menu Map

Errors	Display	Possible Cause
Over heat shutdown	Device Error EO	When the temperature is higher than the limit temperature, the over temperature protection function is activated.
Heat up failed	Device Error E1	Heating system cannot reach pre-set target temperature after 10-min heat-up.
Thermocouple failed	Device Error E3	Short circuit or wrong connection of thermocouple.
Thermocouple tripped off	Device Error E4	Open circuit or no connection of thermocouple.
No remaining run-time	Device Error E5	No remaining run-time.

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