

Product model: V800Y

180° swing electronic spark machine

User manual



! To avoid the machine being in a heating standby state for a long time (turning on heating 5-10 minutes before use is sufficient), this operation can effectively extend the service life of the machine's heating components.

After each performance, before turning off the machine, it is necessary to use the machine's built-in cleaning function to empty the pre heated consumables inside the machine. This can prevent the pre heated but not sprayed consumables in the machine's feeding shaft and the consumables in the material bin from being too dense due to the vibration generated by transportation. This can cause the starting resistance of the machine's feeding shaft transmission motor to be too high and the motor to stop blocking, which will cause the machine to produce empty spraying.

Manual repair required: 1. Please disconnect the power of the machine first, 2. Remove the rubber plug from the maintenance port, use a flat screwdriver to align with the slot on the driven shaft, turn clockwise to clear it, and then restart the machine.

The consumables used in the machine belong to conductive particles. Please make sure to clean the accumulated dust inside the machine regularly, otherwise it may cause short circuits and burn out circuit accessories.

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3. Product Introduction:

Thank you for choosing the V800Y 180 ° swinging electronic cold flame spray machine. It can spray upwards in any single direction between -90 ° and +90 °, or in a swinging order. Interesting and eye-catching. Adjustable swing angle, swing speed, and spray height bring a more dazzling visual effect to the stage. Various editable spark effects bring unlimited creativity to your stage, and we hope it can inspire your performance passion.

V850Y is a revolutionary stage cold flame fountain special effects device that uses a new control system and two communication modes, standard DMX512 and 433MHz wireless remote control, with the ability to switch communication modes for control. The development of stage effect electronic flower sprayers is an intelligent product that integrates mechanical, electronic, intelligent control, electromagnetics, aerodynamics, and other disciplines, capable of achieving various cold flame fountain special effects. The product has tilt protection, chassis over temperature protection, movement over temperature protection, and machine current overload protection. More convenient to use, safer and more reliable.

Focusing on fundamentally changing the traditional concept of cold fireworks, it has seven major features: safety without gunpowder, environmental protection with zero pollution, digital control, low consumption and recycling, simplified operation, low installation cost, and no hidden dangers in transportation. It completely solves many problems of traditional fireworks in terms of safety, environmental protection, and application scope.

Scope of application: The product has an ultra-high spraying effect, with a maximum spraying height of 5.5 meters. The spark effect is more dense and shocking. The external cold fireworks of the equipment are below 50 degrees Celsius and can be widely used in large-scale performances, press conferences, music festivals, weddings, parties, celebrations, performing arts, entertainment activities, and other places to enhance the atmosphere of the scene and create a climax of node atmosphere. It is suitable for various indoor and outdoor scenes.



Please follow the operating requirements in the product manual for use.

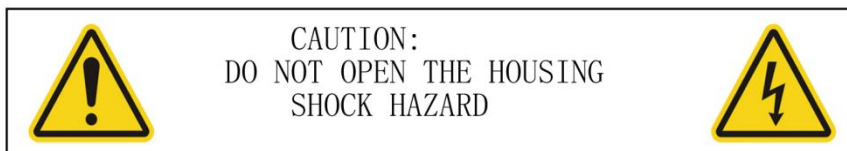
4. Disclaimer:

*Please read the user manual carefully before installing and using this product. Failure to read or comply with this user manual may result in product damage and personal injury, and our company does not assume any responsibility for this.

*This product is a professional equipment, and our company does not assume any responsibility for accidents or losses caused by the use or maintenance of this product by untrained and authorized personnel.

*If there are any changes to the information and product specifications contained in the user manual, our company will not be notified separately and will not be responsible for any errors or omissions. Our company reserves the right to modify the user manual at any time.

5. Preface: *This manual includes equipment safety operation precautions and warnings with the following icons, please read carefully!



! Danger: This warning indicates danger and, if not avoided, may result in personal injury.

*Key information about installation or operation. Failure to follow this instruction may render the machine inoperable, cause damage to the machine, or cause injury to the operator.

! Warning: This alert indicates a warning that, if not avoided, may result in moderate to mild injury.

*Important information about installation or configuration. If you do not understand this information, the machine may not function properly.

matters need attention: This icon indicates considerations that, if not avoided, may affect usage.

6. Product packing list:

Serial Number	configuration name	Quantity/specification
01	V800Y 180° swing electronic spark machine	1 unit
02	Instruction manual	1 copy
03	3 × 1.5 m ² × 1.2-meter power cord	1 Root
04	3 × 0.35 m ² × 2-meter DMX signal cable	1 Root
05	15-button wireless remote control	1 PCS

7. Unpacking

*After receiving the product, please carefully open the packaging box and inspect all contents to ensure that all spare parts are complete and in good condition.

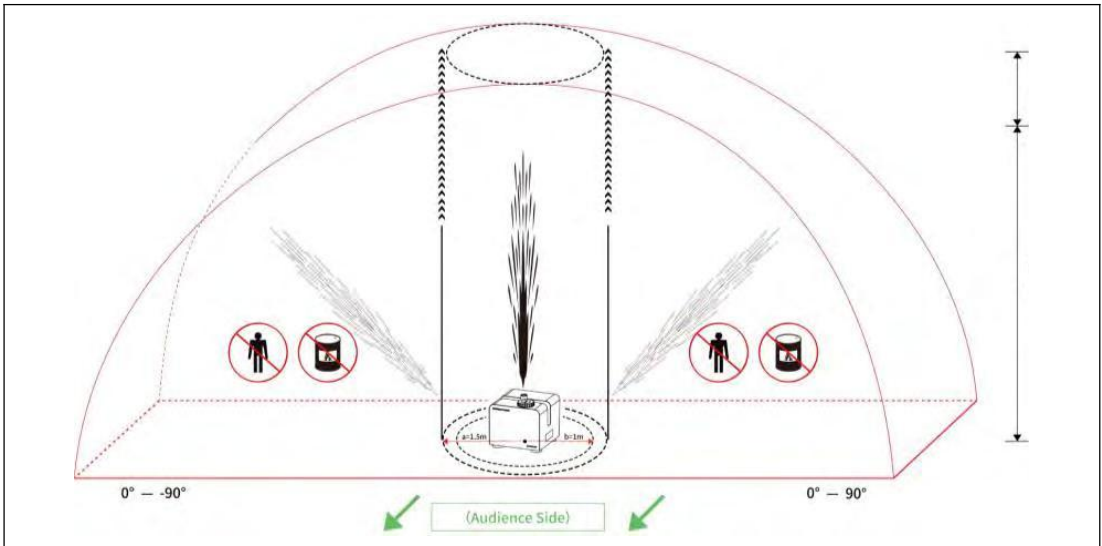
*If the outer packaging and any components are damaged or missing during transportation, please contact the carrier or distributor immediately and return them in their original packaging.

matters need attention:Carefully open the packaging, check and confirm that the item is in good condition.

8. Product Appearance Overview



Number	Product Function Overview (in English)
01	Swinging nozzle
02	storage bin inlet
03	Circular gain antenna
04	control panel
05	Parameter nameplate
06	DMX 3-core XLR output socket
07	DMX 3-core XLR input socket
08	DMX 5-core XLR output socket
09	DMX 5-core XLR input socket
10	Power input socket
11	Power output socket
12	Fuses
13	Power switch
14	Blocking material maintenance port
15	Heat dissipation window
16	Embedded handle



Consumable model	Max. Effect Height	Safety Radius around V800Y (a)	Safety Distance at Firing Direction (b)
MEDIUM	4m	1.5m	5.5m
LARGE	5.5m	1.5m	7m

V800Y safety isolation zone is a three-dimensional space with a cross section of 180° sector enclosed by a and b (check below diagram).

We can understand it as a safety area formed by a safety column with diameter of a, height of b rotate of $\pm 90^\circ$ degrees.

\ Unauthorized persons and objects are strictly prohibited from entering.

\ Depending on the firing sequence / angles the sector area changes accordingly.

\ For angled firing, the safety distance both around machine and firing direction should shift accordingly.

\ In windy environment, increase the safety distance according to the wind direction and speed.

\ Sparks and consumables from the machine can lead to serious eye injury. Always wear safety goggles when enter the safety zone.

10. AC power supply

* Before turning on the power, please check whether the input power supply voltage is consistent with the rated voltage of the machine.

* To determine the power requirements for the machine (circuit breaker or fuse, power socket and wiring), refer to the values listed on the machine panel label, or refer to the technical parameters table. The listed values represent the average current consumption of the machine under normal conditions.

* Always connect the machine to a protected circuit (circuit breaker or fuse). Ensure that the machine is connected to the ground power plug to avoid electric shock or fire.

* Do not connect the machine to the rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is only used as a 0 or 100% switch.

11. Power cord and plug

* Before turning on the power, check for the rated voltage of the machine.

* Make sure that the power cord is not compressed or damaged.

* Do not disconnect the power supply by pulling it on the power cord.

* To eliminate the loss and improve the service life of the machine, please use the circuit breaker to disconnect, or unplug the power plug to completely disconnect the machine from the power supply.

* The power supply cord used in the product is the self-locked power supply wiring, and the other end is the European plug (European market, Chinese market). If the equipped power cord does not have a plug, or needs to change the plug, refer to the following table to install the plug:

3 Core power cord	identification code	Power cord color (US standard)	Power cord (European standard)
AC L live wire	L	schwarz	brown
AC N zero line	N	white	blue
E ground wire	E	Green / yellow	Green / yellow

9. Technical parameters table:

V800Y 180° swing electronic spark machine		
Product parameters		
01	Product model/SKU	V800Y
02	Chassis material	Carbon steel
03	Product color	Black regular/white custom
04	Spray direction	Swinging between -90 ° and +90 °; Fixed shooting angle between -90 ° and 90 °;
05	Y-axis/nozzle angle adjustable	Adjustable angle between -90 ° and 90 °
06	Display panel	2.8 inch color LCD display screen
07	Rated power	800W
08	Input power supply	110V,50/60Hz;220V,50/60Hz
09	Fuses	110V:T20A;220V:T10A
10	Power socket	Power input socket; Power output socket
11	3-pin XLR socket	Male XLR input socket; Female XLR output socket
12	5-pin XLR socket	Male XLR input socket; Female XLR output socket
13	hopper capacity	200/g
14	Consumable consumption	30g/min
15	Heating method	Electromagnetic induction heating
16	Preheating time	4 minutes
17	Temperature control method	Electronic constant temperature control
18	Eruption height	2.5 ~ 5.5 meters; Adjustable eruption height
19	Spray gear	3 eruption gears
20	Communication mode	DMX512 signal; 433MHz 15 key wireless remote control
21	DMX Channel	8-channel expansion mode
22	ambient temperature	-10℃ ~ +45℃
23	Protection level	Indoor/dustproof
24	Net weight	14 KG
25	Product gross weight	14.5 KG
26	Product size	390mmx305mmx315mm

12. Operation precautions:

! Danger:Before operating the machine, carefully read the following precautions.

12.1. Environmental requirements:

! Danger:Do not install products on flammable surfaces (linoleum, carpet, wood, paper, plastic, etc.) to ensure that there are no flammable and explosive items in the use environment.

! Danger:Do not use it in confined spaces, and install the product in a well-ventilated position, located at least 4 inches (10 cm) away from the adjacent machine.

! Danger:This product does not have lightning protection devices. Please do not use this product during thunderstorms.

! Danger:people or flammable materials are at least 22 feet (7 meters) away from the machine, and ensure that the residue does not fall on the flammable items.

! Danger:Please do not use the machine in an ambient temperature exceeding 113 ° F (45 ° C).

! Danger:When installing the machine on the floor, please ensure that the machine and cables are kept away from personnel and vehicles.

12.2 Safety tips:

! Danger:Please always connect the grounding wire with the grounding type socket to avoid the danger of electric shock.

This machine cannot operate in water.

! Danger:When water enters or covers the bottom of the machine on the ground, it can cause machine malfunction or electric leakage danger. Ensure the distance between the bottom of the machine on rainy days There is sufficient safety distance for accumulated water on the ground to prevent water from entering the machine from the bottom.

! Danger:Never touch sparks for danger. Do not touch the machine enclosure while heating or operating the machine.

! Danger:Ensure that no objects fall into the spray nozzle.

! Danger:Do not bring animals, children and unauthorized personnel to the machine.

! Danger:When the spray machine is running, the noise generated is 100 minutes (the point closest to the machine)

! Danger:When adding consumables or testing the machine, please wear protective glasses to avoid eye injury.

! Danger:Suitable fire extinguishers are as follows: Any object similar to sand can be used to cover the fire, and for metal materials that catch fire, please use a Class D fire extinguisher.

! Danger:The temperature of this product during operation is very high, and it will remain at high temperature for a long period of time after stopping operation. It is strictly prohibited to put fingers into the spray nozzle.

! Danger:The continuous spray operation of the machine shall not exceed 5 minutes, and overtime operation will cause damage to the internal parts of the machine.

13. Operating the machine

*Preparation work:

*Confirm that the machine and its accessories are intact and undamaged.

*Place the machine on a sturdy and level ground, and it is recommended that the maximum inclination angle not exceed 15 degrees.

13.1 Install the machine

! Warning:Recommendation Follow the following specifications to install this product.

*Ensure that the installation location is convenient for machine maintenance and operation.

*Ensure that the structure or surface used for installing the machine can support the weight of the machine (see "9. Technical Parameter Table").

! Danger:People or flammable items should be at least 10 feet (3 meters) away from the machine and ensure that consumable residues do not fall on flammable items.

13.2. Special composite consumables (purchased)

*A specially made metal powder with full sparks and minimal residue, which is free from smoke, odors, and toxic gases when used. Aluminum foil bag Vacuum packing, convenient for storage and transportation.

! Danger:It is recommended to use the high-purity specialized consumables provided by our company. Our company does not assume any responsibility for machine damage, personnel damage, or property damage caused by the use of consumables not provided by the company.

13.2.1 Adding Consumables

*Specially designed consumables for spray machines that can create cold fireworks effects for the stage;

*When the power is turned off, please add consumables to the feeding port and prohibit adding consumables to the nozzle;

*Open the rubber stopper cover before adding;

*Tear open the packaging bag of the consumables and pour them into the feeding port on the top of the machine;

*After adding, be sure to cover the rubber stopper cover.

*The storage capacity is 200 grams of consumables.

! Danger: Please add consumables when the power is turned off.

! Danger: When adding consumables and testing the spray machine, please wear protective goggles to avoid eye injury.

13.3 connection machine

*Connect the power supply and the DMX signal cable

* The first connected power plug.

* Put the other machines in parallel with a power connection line.

* Put the other machines in parallel with the DMX signal lines.

* Connect to the DMX512 console, or to the wireless remote control.

! Danger: Do not use damaged power plugs and cables.

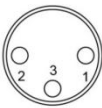
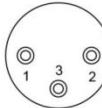
! Danger: The maximum allowable cascade for power cables is 4 units (220V version)/2pcs (110V version). Do not connect multiple units to a single circuit.

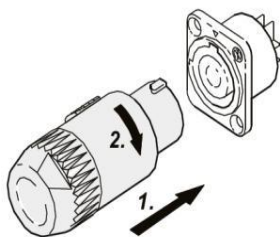
! Warning:Please connect the configured 120 ohm terminal resistor to the signal output port of the last machine to enhance the anti-interference capability of the machine.

matters need attention:The standard length of the DMX signal connection line is 2 meters, and multiple wires can be connected in series to achieve a longer length. (Up to 18 signal lines can be connected in series in a single channel)

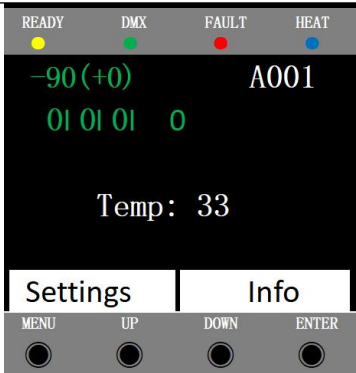
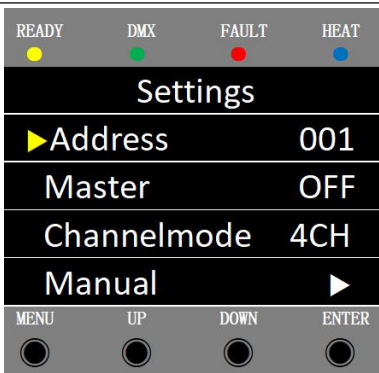
13.4 Before turning on the power

! Warning:Plug the power cord into a grounded socket. Please confirm again whether the voltage specifications are correct before powering on.

 3 Pin XLR	 5 Pin XLR	Pin	1	2	3	4	5
		Function	Ground	Data -	Data +	N/A	N/A
*DMX 512 signal output port (English silk screen text: DMX OUT): 3/5 concave hole XLR (female) socket, connected to the 3/5 convex needle XLR (male) head of the DMX 512 signal line;							
*DMX 512 signal input port (English silk screen text: DMX IN): 3/5 convex needle XLR (male) socket, connected to the 3/5 concave hole XLR (female) head of the DMX 512 signal line;							
Machine connection with DMX 512 signal line: 1. The output port of the DMX 512 console (English silk screen text: DMX OUT): 3/5 concave hole XLR (female) socket, connected to the 3/5 convex needle XLR (male) head of the DMX 512 signal line. Connect the 3/5 concave hole XLR (female) head of the DMX 512 signal line to the input port of the first machine (English silk screen text: DMX IN): 3/5 convex needle XLR (male) seat, which completes the connection of the first machine's DMX 512 signal line.							
Add machine series connection to the DMX 512 signal line: 1. The output port of the first machine (English silk screen text: DMX OUT): 3/5 concave hole XLR (female) socket, connected to the 3/5 convex needle XLR (male) head of the DMX 512 signal line. Connect the 3/5 concave hole XLR (female) connector of the DMX 512 signal line to the input port of the second machine (English silk screen text: DMX IN): 3/5 convex needle XLR (male) connector, which completes the connection of the second machine's DMX 512 signal line. Follow up machines and so on. A single signal line can connect up to 18 machines in series.							

*The powerCON (blue) plug/socket is the power input terminal;	
*The powerCON (white) plug/socket is the power output terminal;	
1. Connect the power cord to the machine: 1. Insert the two different sized protrusions on the front end of the power CON plug, corresponding to the two different sized recesses on the POWER IN power socket, completely. 2. Twist the plug 45 degrees to the right and tighten it;	
2. Unplug the machine power cord: 1. Push and pull the metal latch on the top of the powerCON plug of the power cord outward to unlock it, then twist it 45 degrees to the left and unplug the plug;	

14. Display board operation instructions

*The initial "main interface" of the LCD display panel after startup	*Press the MENU key to enter the "Settings" option interface;
	

14.1. Light indicator description:

1 Yellow (system) indicator light READY:

*The flashing indicator light indicates that the system is preparing;

*The indicator light is always on, indicating that the system is ready to start working;

2 green (signal) indicator lights:

*When the indicator light is off, it indicates that the signal is disconnected and there is no communication connection;

*The flashing indicator light indicates that the remote control is already connected;

*The indicator light is constantly on, indicating that the DMA console is already connected;

3 Red (fault) indicator light

*When the indicator light is off, it indicates that the system has detected that everything is normal;

*The indicator light is constantly on, indicating that the system has detected a fault;

4 Blue (heating) indicator light HEAT:

*The indicator light goes out to indicate that heating is stopped;

*The indicator light is constantly on to indicate that heating is in progress;

14.2. Menu button operation instructions:

MENU: (Menu button) Press this button to enter the main menu interface or return to the previous menu level.

UP: (Add button) Press this button to select the menu upwards and increase the value in the set state.

Down: (Reduce button) Press this button to select the menu downwards and reduce the value in the set state.

ENTER: (Confirm button) Press this button to enter the menu setting state or confirm saving.

14.3. Settings menu

The parameters in the settings menu are shown in the table below. Pressing "UP" or "DOWN" can adjust the option values. Please remember to press "ENTER" to save the settings.

MENU Menu buttons	UP Up/Add button	DOWN Down/Down button	ENTER Confirm button
Press the MENU key to enter the [Settings] menu or the [Information] menu, and press the MENU key to return to the main interface	Press the DOWN or UP key to select ► Set the project, press the DOWN or UP key to increase or decrease the numerical range		First, press the MENU key to enter the [Settings] menu option, set the parameters, and then press this key to confirm and save the settings

Settings menu	range	default	explain
► Address	001 ~ 512	001	Set the DMX address
► Master	OFF/ON	OFF	Set "off" to slave mode and "ON" to master mode.
	Slave mode: will receive signals from the console, remote control, or host;		
	Host mode: will receive signals from the console or remote control and send signals to the slave;		
► Channel mode	8CH	8CH	8-channel expansion mode
► Manual mode	►	get into	After entering the settings, the machine can be manually controlled by simulating an 8-channel interface.
► Motor direction	Forward/Reversal	Forward	After setting to "Reversal", the direction and angle of motor rotation will be mirrored.
► Vertical Encoder	ON/OFF	ON	If the Y-axis motor is set to "ON" and loses step, the encoder will automatically correct and reset.
► Language	Chinese/English	English	The display language of color LCD screens can be switched between Chinese and English
► LCD Backlight	Always on/Timed	Timed	Set the LCD backlight on time. (Set to "Timed" for 10 minutes)
► Heat Temp	540 ~ 580℃	570℃	Set the heating temperature of the machine.
► Auto Heat	OFF/ON	OFF	Setting it to "ON" will automatically turn on heating after the startup reset.
► Tilt Stop	ON/OFF	ON	When the machine tilts more than 45 degrees, it will automatically stop working. Set to "OFF" tilt protection failure;
► Load Default	OFF	ON	"Load Default"Set to "ON" and press the Enter key to restore the factory default values.
Users can set the values of the above menu options according to their actual needs.			
Infor menu	Display value		
VER	Y11525		Program version number
DIS	240715		
Hall state	10		
Y code value	+3890		
System error	►		Display error content
Enter the information menu interface, long press the "Enter" key, and a password input interface will appear. Enter the correct password to enter the advanced menu.			

14.4.Advanced menu(Factory debugging only)

The parameters in the advanced menu are shown in the table below. Pressing “UP” or “DOWN” can adjust the option values. Please remember to press “ENTER” to save the settings.

Advanced menu	range	default	explain
► Reset interface	Standard/ Customized	Standard	Set to 'standard' to display the regular reset interface, Set to 'Custom' reset interface to display customer customized LOGO
► Y-axis correction	0-100	0	Correct the accuracy of the Y-axis being centered and perpendicular with a value of 128 for the DMXs.
► Y-axis speed	50~100	100	Setting of maximum speed
► Y-axis motor	Enable/disable	Enable	Setting it to "disable" will prevent the Y-axis motor from swinging.
► 433Hz wireless	ON/OFF	ON	Set the machine to "on" to receive control of 433Hz wireless remote control.
The factory can set the parameters of advanced menu options according to actual needs.			

*For better performance, please do not change the parameters of the advanced menu settings without permission. The option parameters have been factory calibrated.

DMX Channel Mode Operation

The machine has two channel modes and four channel modes. On the [Settings] page, select [► Channel mode] menu bar settings.

When operating the machine using the DMX 512 console, please confirm whether the channel mode status set by the machine is the same. The 2-channel mode and 4-channel mode can be switched between each other.

Please follow the following rules to set the corresponding DMX address code, otherwise it may cause signal interference.

Machine serial number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
8-channel mode:DMX address code	1	9	17	25	33	41	49	57	65	73	81	89	97	105	113

14.5. 8CH expansion mode DMX channel parameter table:

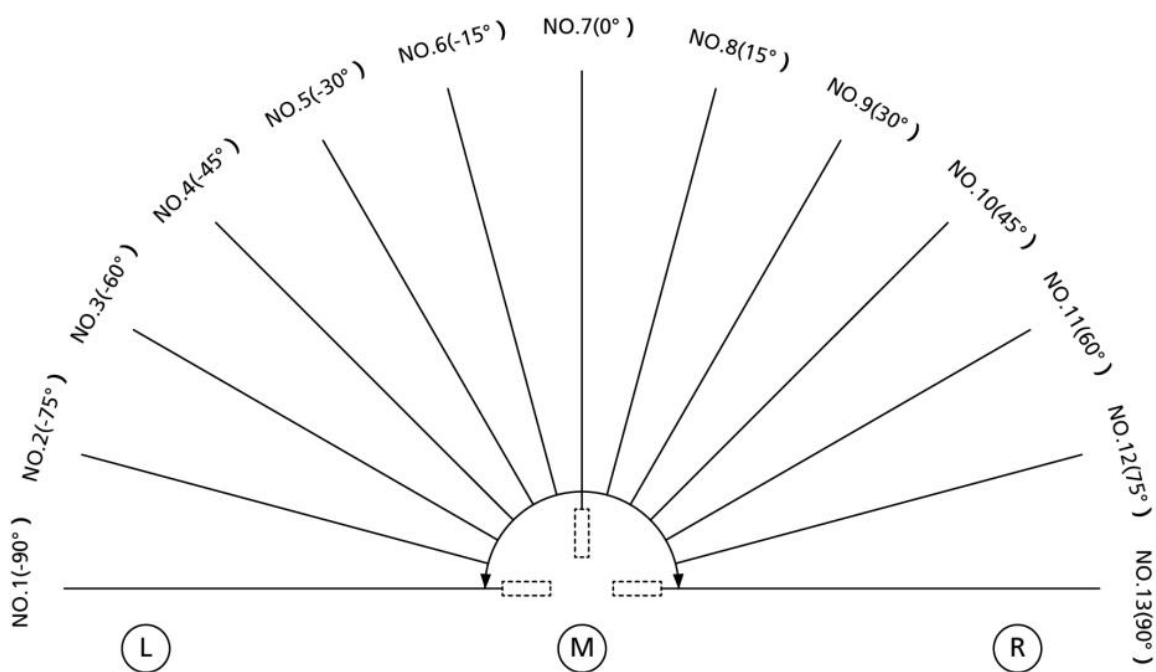
8CH Channel Mode DMX Channel Table			
Channel	DMX numerical value	function	explain
1CH	0 ~ 10	Heating off (automatic preheating on)	
	20 ~ 40	Emergency stop	
	60 ~ 80	Cleaning consumables (to be executed after each performance)	Cleaning the preheated consumables in the heater shaft cavity (delayed triggering)
	200 ~ 255	Heating enabled (automatic heating disabled)	
2CH	0 ~ 255	Adjusting the Y-axis/nozzle swing angle	Angle variation from -90 ° to +90 °; 128 Vertical Up (0 °)
3CH	0~255	Linear adjustment of swing speed from fast to slow	(Adjust the swing speed setting) Nozzle swing speed setting
4CH	0 ~ 15	Spray off	
	16 ~ 95	Low level eruption; Height: 2 meters high	Three spray height levels, with a limited single run time of 90 seconds for the program, After switching to other spray height levels, the program will recalculate the time limit.
	96 ~ 175	Mid range eruption; Height: 3.5 meters high	
	176 ~ 255	High end eruption; Height: 5 meters high	
5CH	0 ~ 5	No preset angle	(This numerical range can be controlled by adjusting the nozzle angle through the second channel)
	6 ~ 255	Preset sequence (see preset sequence appendix for details)	Preset sequence settings
6CH	0~20	Preset the number of nozzle swings; Once	Preset swing frequency sequence setting
	21~ 40	Preset the number of nozzle swings; 2 times	
	41~ 60	Preset the number of nozzle swings; 3 times	
	61~ 80	Preset the number of nozzle swings; 4 times	
	81~ 100	Preset the number of nozzle swings; 5 times	
	101~120	Preset the number of nozzle swings; 6 times	
	121~ 140	Preset the number of nozzle swings; 7 times	
	141~ 160	Preset the number of nozzle swings; 8 times	
	161~ 180	Preset the number of nozzle swings; 9times	
	181~ 200	Preset the number of nozzle swings; 10 times	
	201~ 255	Preset the number of nozzle swings; 11 times	

7CH	0~30	Speed 1=3rd channel value: 000	Scattered sparks	The speed is linearly adjusted from fast to slow. The smaller the DMX value, the faster the swing speed, and the larger the DMX value, the slower the swing speed.
	31~60	Speed 2=3rd channel value: 195	Special Bend Spark	
	61~90	Speed 3=3rd channel value: 205	Big Bend Spark	
	91~120	Speed 4=3rd channel value: 215	Mid bend spark	
	121~150	Speed 5=3rd channel value: 225	Small Bend Spark	
	151~180	Speed 6=3rd channel value:235	Micro bending spark	
	181~255	Speed 7=3rd channel value: 245	Straight line spark	
8CH	0~50	Close the preset settings demonstration		
	51~ 255	Demo preset settings for spark effects		(Fixed angle injection depends on CH4 channel)

14.5.1. Channel 2 (CH2): Manual angle setting

The Y-axis can be maintained at any angle between -90 ° and +90 °. The following is a list of typical angles used in our preset sequence, along with the relevant DMA values.

Preset angle sequence	Preset angle	DMX numerical value
1	90°	1
2	75°	22
3	60°	43
4	45°	64
5	30°	85
6	15°	106
7	0°	128 or 0
8	-15°	150
9	-30°	171
10	-45°	192
11	-60°	213
12	-75°	234
13	-90°	255



14.5.2. Expansion mode 5 channels: preset sequence (Match 15 key remote control)

With 43 preset sequences, operators can find relevant DMX channel values or access a preset sequence number according to the preset sequence table.

sequence	Preset angle	DMX numerical value	Ignition duration
0	No preset angle	0 ~ 5	Invalid (This numerical range can be controlled by adjusting the nozzle angle through the second channel)
1	(-90°)	6 ~ 10	Depends on CH4 channel
2	(-75°)	11 ~ 15	Depends on CH4 channel
3	(-60°)	16 ~ 20	Depends on CH4 channel
4	(-45°)	21 ~ 25	Depends on CH4 channel
5	(-30°)	26 ~ 30	Depends on CH4 channel
6	(-15°)	31 ~ 35	Depends on CH4 channel
7	0°	36 ~ 40	Depends on CH4 channel
8	15°	41 ~ 45	Depends on CH4 channel
9	30°	46 ~ 50	Depends on CH4 channel
10	45°	51 ~ 55	Depends on CH4 channel
11	60°	56 ~ 60	Depends on CH4 channel
12	75°	61 ~ 65	Depends on CH4 channel
13	90°	66 ~ 70	Depends on CH4 channel
14	(-90°) ~ 90°	71 ~ 75	
15	(-75°) ~ 75°	76 ~ 80	
16	(-60°) ~ 60°	81 ~ 85	
17	(-45°) ~ 45°	86 ~ 90	
18	(-30°) ~ 30°	91 ~ 95	
19	(-15°) ~ 15°	96 ~ 100	
20	(-90°) ~ 75°	101 ~ 105	
21	(-90°) ~ 60°	106 ~ 110	
22	(-90°) ~ 45°	111 ~ 115	
23	(-90°) ~ 30°	116 ~ 120	
24	(-90°) ~ 15°	121 ~ 125	
25	(-90°) ~ 0°	126 ~ 130	
26	(-75°) ~ 60°	131 ~ 135	
27	(-75°) ~ 45°	136 ~ 140	
28	(-75°) ~ 30°	141 ~ 145	
29	(-75°) ~ 15°	146 ~ 150	
30	(-75°) ~ 0°	151 ~ 155	
31	(-60°) ~ 45°	156 ~ 160	
32	(-60°) ~ 30°	161 ~ 165	
33	(-60°) ~ 15°	166 ~ 170	
34	(-60°) ~ 0°	171 ~ 175	
35	(-45°) ~ 30°	176 ~ 180	
36	(-45°) ~ 15°	181 ~ 185	
37	(-45°) ~ 0°	186 ~ 190	
38	(-30°) ~ 15°	191 ~ 195	

39	(-30°) ~ 0°	196 ~ 200	
40	(-15°) ~ 0°	201 ~ 205	
41	(-90°) ~ 0°	206 ~ 210	Slowly sway and gradually decrease the angle
42	90° ~ 0°	211 ~ 215	Slowly sway and gradually decrease the angle
43	(-90°) ~ 90°	216 ~ 255	Slowly sway and gradually decrease the angle

14.6. Control Machine Spray

*This machine can be controlled through two communication modes: DMX512 console or 433MHz wireless remote control, and can be switched between communication modes.

14.6.1. Turn on the control panel power supply

*Connect the input end of the machine's DMX signal line to the output end of the console.

14.6.2. Enable heating function

matters need attention:The values of 200-255 in the first channel are for activating the heating function, which takes about 5 minutes to complete preheating after activation.

matters need attention:After turning on the heating, the "HEAT" blue indicator light on the machine will flash, while the "READY" yellow indicator light will flash, indicating that the machine is heating.

matters need attention:When the "READY" yellow indicator light becomes permanently on, it indicates that the heating has been completed, the system is ready, and the machine is in a sprayable state.

14.6.3. Adjusting the eruption height:

The 5-channel mode uses the first channel to adjust the spray height, and the values of 16-255 are used to adjust the spray height for gears 1-3.

! Danger:Do not touch sparks. It is strictly prohibited to put fingers into the spray nozzle.

! Danger:Please do not touch the machine casing when heating or operating the spray machine.

! Danger:People or flammable items should be at least 23 feet (7 meters) away from the machine and ensure that debris does not fall on flammable items.

! Danger:The maximum spray height of indoor and outdoor consumables varies, with indoor consumables reaching a maximum of 4 meters and outdoor consumables reaching a maximum of 5.5meters.

matters need attention:If affected by the wind, the height of the spray will decrease, and the direction of the spray will also tilt due to the influence of the wind.

matters need attention:It is recommended to use the following methods to extinguish the fire: any object similar to sand can be used to cover the fire, and Class D fire extinguishers are used for metal material fires.

14.6.4. Material cleaning

This product has a material cleaning function, which can clean up the heated but not sprayed consumables to avoid clumping and jamming in the combustion chamber.

matters need attentio: Use the cleaning function of the first channel to clean consumables, with a value of 60-80 (delayed triggering) for the DMX

matters need attention:Please be sure to perform this function before turning off the machine after each performance.

14.6.5. Cleaning the machine

After completing the material cleaning, it is necessary to do a good job in cleaning the machine to extend its service life.

*Turn off machine power

*Unplug the power cable and the DMA signal cable

*Clean the dust and debris on the surface of the machine with a damp cloth

*Put the unused consumables into a Vacuum packing bag and seal it. Place in a cool and dry place to prevent moisture and keep away from high temperatures, open flames, and other environments.

! Warning:Do not pull the power cord to disconnect the power supply. To avoid unnecessary machine wear and improve the service life of the machine, please unplug and power off the plug during non use.

14.6.6. Machine maintenance

*In order to maintain optimal performance, it is necessary to perform some maintenance on the spray machine. The necessary maintenance is as follows:

*After using it for a period of time, please check if there are any consumable nodules on the nozzle. If necessary, please clean it, otherwise it may affect the spray effect and even damage the machine.

*Please test the sprayer once a month to maintain its optimal performance.

! Danger: The consumables used in the machine belong to conductive particles. Please make sure to clean the accumulated dust inside the machine regularly, otherwise it may cause short circuits and burn out circuit accessories.

15. Fault reporting and handling methods:

Operation instructions: The following interface cannot be operated and will only appear when the system reports an error.

code	trouble display	Fault description	Solution
E0	Heating error	Excessive heating time Heating for 10 minutes without reaching the set temperature	1. Check if there is any looseness or open circuit at the connection end of the heating plate harness
			2. Replace the heating plate
			3. Replace the electromagnetic heating coil
			4. Replace the control motherboard
E1	Excessive temperature	Heating temperature reaches the preset alarm temperature; Heating movement temperature over limit protection;	1. Replace the heating plate
			2. Replace the VH/4P connection harness between the control motherboard and heating board
			2. Replace the thermocouple (temperature sensor)
E2	Short circuit of thermocouple	Thermocouple reversed or short circuited	3. Replace the control motherboard
			1. Check if there is any reverse or short circuit phenomenon at the connection end of the thermocouple harness
E3	Thermocouple open circuit	No thermocouple inserted or thermocouple open circuit	2. Replace the thermocouple (temperature sensor)
			1. Check if there is any looseness or open circuit at the connection end of the heating plate harness
E4	Temperature error	After the heating function is turned on for 180 seconds,The screen displays no change in detected temperature	2. Replace the thermocouple (temperature sensor)
			2. Replace the control motherboard

16. Remote control of electronic flower spraying

16.1. Remote control operation instructions

1;Remote control conventional spray operation process:

1. Connect the power and signal wires of the machine, turn on the power switch, and confirm that the communication with the control console is disconnected.

2. Press the (HEAT ON) key to turn on heating, the "HEAT" indicator light flashes, and the display screen displays the temperature of the heating mechanism in real time,

Wait for the "READY" indicator light to remain on, indicating that the heating system is ready and the machine can be operated to spray.

2.1. Press the (HEAT OFF) key to turn off the heating, and the "HEAT" indicator light will turn off.

3. Press the (HEIGHT 1/HEIGHT 2/HEIGHT 3) key to select a gear and the machine will start spraying flowers.

2;Remote control special effect spray operation process:

1. Connect the power and signal wires of the machine, turn on the power switch, and confirm that the communication with the control console is disconnected.

2. Press the (HEAT ON) key to turn on heating, the "HEAT" indicator light flashes, and the display screen displays the temperature of the heating mechanism in real time,

Wait for the "READY" indicator light to remain on, indicating that the heating system is ready and the machine can be operated to spray.

2.1. Press the (HEAT OFF) key to turn off the heating, and the "HEAT" indicator light will turn off.

3;Master slave mode settings

3.1. Master slave mode; The initial "Home screen" of the LCD screen starts up, press the MENU key to enter the "setting";

3.1.1 Press the **DOWN** key to ► **[master]** option, set to "ON", indicates that the current machine is in host mode.

3.1.2 Press the **DOWN** key to ► **[master]** option, set to "OFF", indicates that the current machine is in slave mode.

4. Push open the back cover of the remote control, insert the corresponding battery, pull out the metal antenna, and set it to the machine operation in the host mode;

4.1. Press the (HEIGHT 1/HEIGHT 2/HEIGHT 3) key to select a gear and run the spray effect.



16.2. Remote control button operation instructions

V800Y 180° swing electronic spark machine -15 Key Wireless Remote Control Button Function Comparison Table			
key	printing	Corresponding functions	Function Description
1	<u>SPARK</u> <u>HEIGHT</u>	launch spark Adjusting spark height	When the heating temperature reaches the preset value, press this button to trigger the machine to spray sparks, Press this button again to cycle and adjust the height of the emitted spark.
2	<u>PERFORM</u> <u>PRESET</u>	Demonstration of preset spark effects	Press this button to trigger the demonstration preset spark effect;
3	<u>SWING</u> <u>ANGLE</u>	Set nozzle swing angle	Press this button to cycle and adjust the nozzle swing angle; Minimum swing angle: (-15°~+15°), maximum swing angle: (-90°~+90°)
4	<u>SWING</u> <u>SPEED</u>	Adjusting the nozzle swing speed	Press this button to cycle and adjust the nozzle swing speed;
5	<u>SWING</u> <u>REPEAT</u>	Adjusting the number of nozzle swings	Press this button to cycle and adjust the number of nozzle swings: 1-6 times;
6	<u>HEAT</u> <u>ON</u>	Turn on heating	Press this button to turn on the heating [HEAT] indicator light, and the display screen will display the real-time heating temperature
7	<u>HEAT</u> <u>OFF</u>	Turn off heating	Press this button to turn off the heating [HEAT] indicator light and display the real-time temperature on the screen
8	<u>STOP</u>	Emergency stop	Press this button to stop the machine from running
9	<u>CLEARING</u>	Material cleaning function	Press and hold this button for 3 seconds, and the machine will automatically clear the material for 30 seconds(Must be performed after each performance) Clean the preheated consumables in the heater shaft chamber.
10	<u>SLOW</u> <u>180°-3</u>	T01 preset special effects	After pressing this key, press the [PERFORM PRESSET] key again, and the machine will demonstrate this shortcut preset effect Slow/sway/180 °/3 times;
11	<u>MEDIUM</u> <u>180°-3</u>	T02 preset special effects	After pressing this key, press the [PERFORM PRESSET] key again, and the machine will demonstrate this shortcut preset effect Medium speed/sway/180 °/3 times;
12	<u>SLOW</u> <u>150°-3</u>	T03 preset special effects	After pressing this key, press the [PERFORM PRESSET] key again, and the machine will demonstrate this shortcut preset effect Slow/sway/150 °/3 times;
13	<u>MEDIUM</u> <u>150°-3</u>	T04 preset special effects	After pressing this key, press the [PERFORM PRESSET] key again, and the machine will demonstrate this shortcut preset effect Medium speed/sway/150 °/3 times;
14	<u>SLOW</u> <u>120°-5</u>	T05 preset special effects	After pressing this key, press the [PERFORM PRESSET] key again, and the machine will demonstrate this shortcut preset effect Slow/sway/120 °/5 times;
15	<u>MEDIUM</u> <u>120°-5</u>	T06 preset special effects	After pressing this key, press the [PERFORM PRESSET] key again, and the machine will demonstrate this shortcut preset effect Medium speed/sway/120 °/5 times;

Product Warranty Card		
product name	180° swing electronic spark machine	required fields
product model	V800Y	required fields
date of purchase		required fields
Purchase address		required fields
contact number		
Contact address		
Fault phenomenon		
Troubleshooting	(Filled in by the manufacturer)	
Note: Be sure to fill in this warranty card clearly, so that we can quickly provide you with a solution!		
Remember to put this warranty card into the package together with the machine to be repaired!		

Product warranty instructions

* Sincerely thank you for choosing our products. As a customer of our company, you will receive the full range of quality services provided by our company.

* The Warranty card has a form for users to fill in the information. If the product needs a warranty, please present this warranty card and the purchase certificate as the traceability certificate, Please keep your warranty card and purchase certificate properly.

The Warranty Instructions are as follows:

1. The warranty period of this product: (from the date of purchase) one year.
2. Product replacement period: (from the date of purchase) If the product cannot be used normally due to quality problems within 15 days, it can be exchanged for the same model product.
3. During the warranty period, due to the hardware failure caused by the product itself, the company will provide customers with free maintenance services, please do not dismantle the machine for maintenance.
4. If the machine is not used with our special consumables, the product warranty period will be reduced to six months.
5. The user shall be responsible for any damage or accident to the machine caused by the use of unqualified consumables.

It is not covered by the warranty service if:

1. Damage caused by external reasons or failure to operate the machine according to the instructions;
2. The machine has been operated wrongly or used negligently, for example, it has been connected to the wrong input voltage, used under overload, etc;
3. Failure caused by the use of environmental factors, such as: unstable input voltage, liquid infiltration, etc.;
4. The machine has been disassembled, modified or repaired without authorization;
5. Damage caused by user's improper operation of the machine (handling, installation, use, maintenance) or man-made damage;
6. Damage caused by incorrect installation or use by users; For products not covered by the warranty, corresponding maintenance service fees shall be charged;
7. For the products exceeding the warranty period, only the corresponding parts cost fee will be charged;
8. If you need maintenance, please show the purchase certificate and this warranty card, otherwise it will not be handled;
9. This product is a high-temperature consumption product, and its normal service life is five years. The Company shall not be responsible for any failure or accident caused by overdue use;
10. The company has the right to explain all the contents of this warranty card. If there is any ambiguity in the use, please contact your dealer for consultation.