## **SPARK MACHINE USER MANUAL**

Please read this manual carefully before operating this product.



## Safety

#### **Warnings and Cautions**



The sign is to remind users of paying attention to risk and security.

Please note that the machines are not meant to be a continuous duration effect. The maximum running time is 30 second and can be repeated but should not be done to overheat the machine.

#### **Eye Protection**



Eye protection warning sign is to remind you of protecting the eyes during the machine operation.

## **Injury Voltages**



Warning: Dangerous voltages are present in this machine when electrical power is applied. There is a danger of injury from electric shock. Under no circumstances are you to attempt to open the machine or attempt to remove or adjust any components fitted within the machine.

Only fully trained engineers can open the equipment.

### **Caution Against Liquids**



Use caution so that any liquids do not wet the machine.

Keep the machine and controller dry and not use rainy or snowy days unless covered.

#### Warning



Please prevent anything from entering the fountain port, if this happens

Please clear obstructions before continuing operation.

Please prevent machine from dropping when installing "DAMAGE CAN OCCUR".

#### Cleaning



Please inspect fountain nozzle before use and confirm whether there are accumulation granulates. If it does, please clean out by inverting the machine to clean out port.

## > Security Considerations:

- 1. Unauthorized repair is prohibited, or else it may cause serious accident.
- 2. Keep spark machine dry and do NOT use in rain or snow.
- 3. Make sure the hopper lid is well covered when use spark machine. Accidentally Burning of Composite Ti can only use sands to extinguish. Composite Ti should be stored in a dry sealed environment.
- 4. Keep audience and flammable material at a minimum distance of 3m from spark machine. Make sure sparks shooting out from spark machine can NOT reach any objects.
- 5. It is necessary to clean the Composite Ti remains in the pipe before and after the show. Check whether there are Composite Ti remains in the nozzle after each show. If it does, please clean it up, or else it will affect the shooting effect or even damage spark machine.
- 6. Connection maximum is 6 pieces, and over-connection may result in damage or even fire.
- 7. For better heat dissipation, do NOT block the air intake and air outlet.
- 8. Cover nozzle is prohibited.

## > Parameter(machine):

Model:	spark machine 1(DMX control mode) spark machine 2(DMX+remote control mode)
Working Height:	1-5 meters
Working Temperature:	-10°C-50°C
Heating Power:	400w 3.6A (110V version) 400w 1.8A (220V version)
Fuse:	110V/10A, 220V/6A
Control:	DMX/remote control+DMX
Net Weight:	9.5kg
Dimensions:	230*195*300mm
Max connections:	6 pieces
Warranty:	1 year
Package:	Carton box Flight case(2 in 1) Flight case(4 in 1)

## > Parameter(consumables):

Consumable material:	Titanium Alloy Grains
Net Weight:	200g
Usage:	total 15-20 minutes spark shooting
Package:	Vacuum packing

## > DMX 512 setting:

The first channel:	Functions:
0-10	Pre-heat OFF
11-220	E-stop(E57)
221-239	clear powder(CLE)
240-255	Pre-heat ON
The second channel:	Functions:
0-15	Pre-heat OFF
16-39	working height 1
40-63	working height 2
64-87	working height 3
88-111	working height 4
112-135	working height 5
136-159	working height 6
160-183	working height 7
184-207	working height 8
208-231	working height 9
232-255	working height 10

## Operation Panel:



**READY:** After set the first channel(240-255 pre-heat ON) for about 5 minutes, when the "READY" green light turns from flash light to continuous light, it indicates that the machine is ready to work.

**DMX**: Flashing shows that DMX signal is connected, otherwise no signal.

**FAULT:** The light is on with any malfunction.

**HEAT**: When the machine is heating, signal light lights.

LED screen shows the DMX status and working status. ("down"&"up" button adjust DMX channel. For example, "001", it is connecting the 1<sup>st</sup> channel. When it is heating, LED screen shows the temperature.)

# Remote control mode: only spark machine 2(DMX+remote control mode) has this function

- 1. Please press the red button "Power" to turn on the machine.
- 2. Machine is connected when it displays "FFF" on the screen.
- 3. Button 1 means working height 2; button 2 means working height 6; button 3 means working height 10.
- 4. E-stop: emergency stop
- 5. Clear powder: Please press it to clear the remains in the pipe in case of remains being stuck. Press "OFF" to stop this process.
- 6. Turning off: please press the red button for 3seconds.



### **Power cable connection:**

For convenient use, there are power supply cable and power supply ex-cable. power Supply ex-cable can achieve multiple devices connected, and maximum cascade is 6pcs.

If you use mobile power plate, be sure to use good quality and match rated power products. 6 pcs machines requires around 2400 watts, cores should be over 1.5 square.

## ➤ Material clean(important note):

- 1. Please empty the powder by turning over the machine and clean remnants (DMX control address: 221-239) after use.
- 2. If the remnants are stuck, you have to open the housing and manually rotate the chain anticlockwise.
- 3. We don't offer free warranty once the machine stops working without clean process after use.



## Dust clean(important note)

- 1. Take down the dust-proof net to clean the dust.
- 2. Unplug the two plugs below machine and shake It.



## > Warning:

- 1. Do not run over 30 seconds for each time.
- 2. Make sure the device is turned off while refilling.
- 3. In case of fire, use sand to extinguish. Do not use water.
- 4. Keep away from children.
- 5. Damage caused by improper using, installation, transportation, and maintenance, or damage caused by human factors are out of our warranty service range.