



PRODUCT: COLD SPARK MACHINE
MODEL: MK-E18

USER MANUAL



VERSION 2.0

1. PRECAUTIONS

Dear customers:

Thanks for choose our cold spark machines, pls read the user manual careful before used to get better user experience.

1)Due to the manual content limited, pls understand missed some of detail and safety direction in using, and not undertake the responsible of the use result for missing.

2)We will continue to focus on products' research, development and technical improvement to create better experience effectsso we reserve the right to make changes to the products, not do inform, the manual just for your reference, the final based on the products you received.

Package Contents

- 1 x spin spark machine;
- 1 x remote controller;
- 1 x power cord;
- 1 x signal cable.

2. Product diagram



1	Display	4	Power port	7	Spray hole
2	Parameter label	5	Power switch	8	Powder hole
3	DMX port	6	Fuse		

Working Height	1-5m	Control mode	DMX
Fountain direction	360°	Housing material	Aluminum
Working Temperature	-10-50	N.W	20kgs
Power	1300W	Dimension	365*365*400mm
Fuse	110V/16A, 220V/10A	Warranty	1 year
Interface	Double DMX input, Double AC power		

3. Operation Panel



1) LCD Display Area

1---Means nozzle 1 fountain, the following number is heating temp. of nozzle 1.

DMX/RF---Show "DMX", then be controlled by console, the following number is DMX address code; If show "RF", then in remote control mode.

RPM---Spinning speed, the following number is R/M(within 60-100).

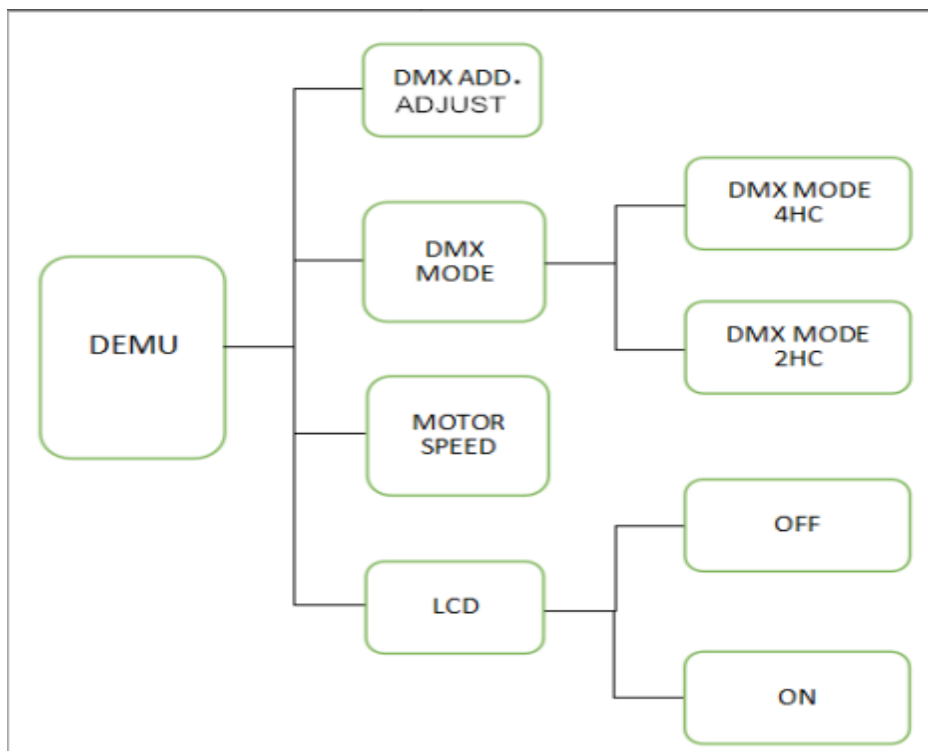
2--Means nozzle 2 fountain, the following number is heating temp. of nozzle 2.

2) Control Button Area:

MENU: menu DOWN: down

UP: up

ENTER: confirm and save



Press ENTER each time you make a selection

3)Indicator Description

READY: Green light When the “READY” green light always light on, can start to do fountain.

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

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

HEAT: Red light When the machine is heating, signal light is on; once reach to working temp., will light off.

Operation Instructio Please ensure sufficient consumables before use; After added consumables, cover the rubber plug (don't add to wrong fountain hole)

This product support DMX console and remote control two operation modes.



1)DMX 512 Operation :

1.The machine adopts 3-pin signal wire connection, with DMX IN and DMX OUT double interfaces, which can be used for multiple connections and is suitable for standard 512 signal control.

DMX control included two channel modes (common mode occupied 2 channel, professional mode occupied 4 channel).

2-channel common mode

1st channel	Function
0-10	Pre-heat turn off
11-220	Emergency stop
221-239	Clear Powder
240-255	Pre-heat turn on
2nd channel	Function
0-15	Fountain off
16-55	Not spin, Fountain 1
56-95	Not spin, Fountain 2
96-135	Not spin, Fountain 3
136-175	spin, Fountain 1
176-215	spin, Fountain 2
216-255	spin, Fountain 3

4-channel common mode

1st channel	Function
0-10	Pre-heat turn off
11-220	Emergency stop
221-239	Clear Powder
240-255	Pre-heat turn on
2nd channel	Function (Nozzle 1)
0-15	Nozzle 1 fountain off
16-31	Not spin, Fountain 1
64-111	Not spin, Fountain 2
112-159	Not spin, Fountain 3
160-207	Not spin, Fountain 4
208-255	Not spin, Fountain 5
216-255	spin, Fountain 3
3rd channel	Function (Nozzle 2)
0-15	Nozzle 2 fountain off
16-31	Not spin, Fountain 1

64-111	Not spin, Fountain 2
112-159	Not spin, Fountain 3
160-207	Not spin, Fountain 4
208-255	Not spin, Fountain 5
4th channel	Function (Spinning adjust)
0-15	Not spin
16-135	Clockwise spin (60-100BPM)

2. Console operation

1. Connect the power cable and DMX signal cable of machine, turn on green power button, DMX blue indicator light keep in flashing, means DMX signal connected successful.

2. The first channel push to top start heating, till the green indicator light always in lighting, then can do fountain.



1st channel push to top, start heating (value: 240-255)

③ Push the second channel do fountain.



2nd channel do fountain

1.Power(remote signal connect/unconnected): short press 1s connect to machines, the display will show from "DMX" become to "RF" if connected successful; long press 3s unconnected, display show "DMX".



2.HEAT ON/OFF: after 1s do heating, red indicator will light, display will show dynamic temperature value, till green indicator always keep light on, then finished heat.

3.Press spray buttons do spray effects.

4.CLE (clear powder): Press CLE, then machine do clear powder 30s, press HEAT button if need stop. (The operation clear powder refer to item six)

5.STOP: stop doing spray.

Consumables

1)The consumables are classified as:

SMALL: the spark fountain height 1.0-3.5m (error 0.5m), and the spot is rarely dropped,use for indoor.

LARGE: the spark fountain height 2.0-5.0m (error 0.5m), and the sprayed spot has dropped ground,use for outdoor.

2)Consumables choice: Consumables are the customized formula for the test of our machines. Please select our consumables to avoid affecting the effect of the machine; (No warranty service is provided for machines damage caused by consumables not from our company).

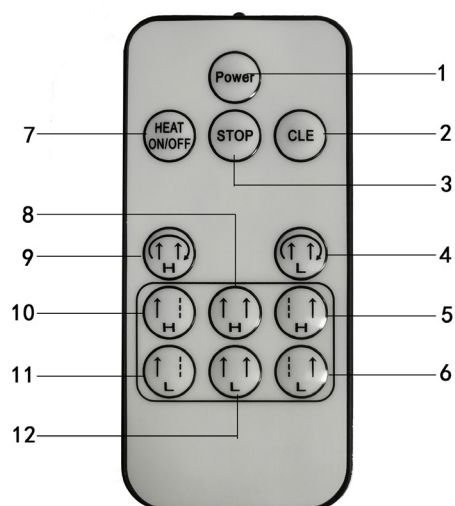
3)Consumables save: Consumables should be kept in a dry and sealed environment to prevent moisture.(wet and sundry consumables should not be used)

4)Consumables add: Pls stop running the machines before add the consumables, to avoid accidental injury.

④ End of event -- Clean powder (cleaning operation refer to point 7)



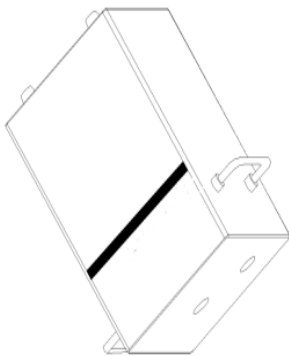
2) Remote Operation



1	Connect/ Unconnected	5	Nozzle 2 not spin, do high spray	9	2 nozzles spin, do high spray
2	Clear Powder	6	Nozzle 2 not spin, do low spray	10	Nozzle 1 not spin, do high spray
3	Stop spray	7	HEAT ON/OFF	11	Nozzle 1 not spin, do high spray
4	2 nozzles spin,do low spray	8	2 nozzles not spin, do high spray	12	2 nozzles not spin, do low spray

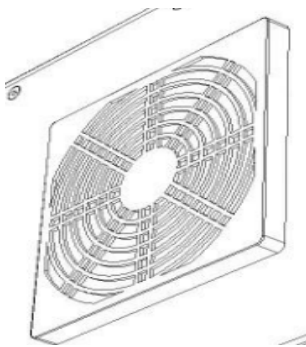
4. Clean and Maintenance

Clear powder Pls empty the remaining consumables after used, and power on use Clear Powder process to clear the remaining material by remote controller or DMX controller. (Note: problems caused by improper cleaning will not be covered by the free warranty).



Dust net cleaning Please clean the dust net regularly, to avoid block the dust net and influence heat dissipation of machine. (The dust screen can be removed directly from the outside)

3



External cleaning Please wipe the machine gently with soft cotton, to avoid scratch the machine housing.

Internal cleaning There have clear hole at the bottom of the machine, through which the internal dust can be poured out.

6. After-sales

Warranty 1 Year (Subject to the date of manufacture)






Each machine is affixed with the factory code. The factory code shall be provided when enjoying the warranty service. It is invalid if torn

It's may need provide some videos or pictures to confirm the problems.

Fault light (yellow) display and processing method

Display content	Fault causes	Solution
E01	Heating failure	1Check if the heat dissipation plate is normal. 2: Replace the heat dissipation plate or heating board.
E02	Heating is not controlled	Replace the heating board.
E03	The internal temperature of the machine is extremely high	1Check the cooling fan. 2: stop heating and operating, restart after 10 minutes.
E04	The air blower does not work	1Check if there is any foreign object falling into the nozzle. 2: Replace the air blower motor.
E05	The sensor is faulty	1Check sensor socket. 2: replace the sensor.
E6	Anti-tilt safety function is enabled	1: Pls restart the machine, don't tilt machine again after power on.
E07	Safety protection of blower motor	Shut down the machine to check whether the blower motor is working properly

5. Warnings and Cautions

	Warning: High temperature warning, high temperature at exit.
	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 warning sign is to remind you of protecting the eyes during the machine operation.
	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.
	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.
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.

1) Do not shoot more than 30 seconds each time. If the continuous shooting time is too long, the internal temperature will rise sharply and cause permanent damage. After a single long-time shooting, the machines should have a short pause to cool down.

2) The spark shooting will stop automatically after 30 seconds. If users need it to work again, please operate the second channel again.

3) Max connection is 6 pieces via power connecting cable too many devices work together can cause damage or fire

4) If there is no spark out with enough consumables, it is possible that the chain is stuck and please open the side rubber and rotate the chain manually. Please contact after-sale service for help if it does not work.

5) After use the machines, do not immediately turn off the power. The heat-dissipating fan should take out the internal air when the power is on. Otherwise, the internal heat is quickly transmitted to the surface of the casing.

6) Please place the equipment in an open place and keep a safe distance of more than 5 meters from the personnel.

7) Make sure the device is off before filling the consumables

8) If the consumables are accidentally ignited, please use the sand to extinguish, do not use water.

9) Damage caused by improper use or human factors is not covered by the warranty.

10) The final interpretation right belongs to our company.

11)The machine built-in protection procedures, will stop auto. once do fountain over 30s each time. If need it to work again, please operate the second channel again. The continuous shooting time is too long, the internal temperature will rise sharply and cause permanent damage. Suggest not do continuous shooting over 1minutes.