Cold Spark Machines User Manual

Stage Effects Series

Model：Ground　750W

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 effects, so 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.

1．Package Contents

Included in delivery:

1 x cold spark machine;

1 x power cord;

1 x signal cable;

1 x remote controller

2．DMX Instruction

1) The machine adopts 3-pin signal wire connection (5-pin can be customized), with DMX IN and DMX OUT double interfaces, which can be used for multiple connections and is suitable for standard 512 signal control.

2) Please refer to attached for the channel occupied by DMX and its description

3) DMX address code adjustment.

△：Means increasing DMX address code; long press helps increase fast.

▽：Means decreasing DMX address code; long press helps decrease fast.

Note: When used DMX 512 signal control mode, each device is connected through DMX signal socket INPUT and OUTPUT of the device. The 3-pin XLRXL plug terminals of the connected device must correspond to each other. It is recommended to use DMX signal terminators when connecting device signals, and use double stranded shielded cables can avoid signal interference.

3．Indicator Description

READY：Green light　　When the "READY" green light turns from flashing into light on, it indicates that the machine is ready to work.

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.

4．Remote Controller
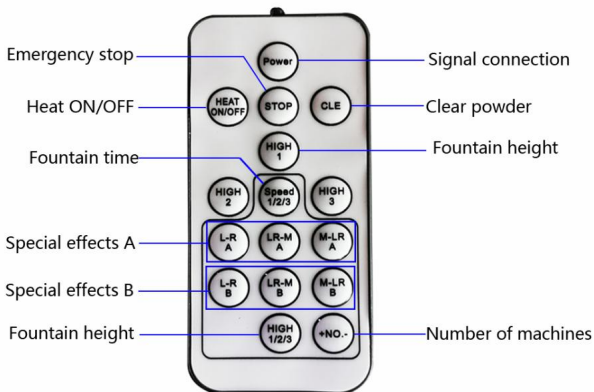
1) **Suitable models instruction:** this remote controller be suitable for all of models with remote function.

2) **Buttons usage instruction:** the remote controller include two parts, one for basic functions, another for special effects(the functions within black line)
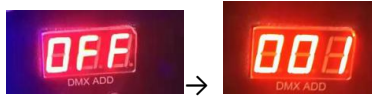
❶Power：(signal connection)short press 1second is connect the machine, the display will show "FHH" after connected, then "FHH" will change to

3

special effects address as below show, that's connected successful. Long press 3seconds is unconnected, the display show "OFF", then change to "001" as below:

Signal connected successful：   →
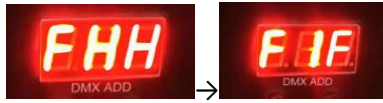
Signal unconnected：   →

❷HEAT ON/OFF: (Heat ON/OFF) press button start to heat, red indicator light will lighting, the display will show heating temperature; long press 3seconds is stop heating, the heat indicator is off, show the address code of the special effects.

❸STOP: (Emergency stop) stop do fountain.

❹CLE: (Clear powder) the machine will do clear powder 30seconds automatically. (pls pour out the rest powder from powder box of machine before do this function)

❺HIGH1/HIGH2/HIGH3: (Fountain height) high 1 - fountain lowest, high 3- fountain highest

❻Speed: (Fountain time adjustment) multi-machines do fountain effects, the fountain time of each machine is 1-3seconds, can be adjusted by short press before do fountain.

❼L-R A: from left to right each machine do fountain on sequence.

❽LR-M A: from left & right side to middle, there have two machines do fountain at the same time.

❾M-LR A: from middle to left & right side, there have two machines do fountain at the same time.

❿L-R B: from left to right increase one machine do fountain, till all the machines in fountain.

⓫LR-M B: from left & right side to middle increase two machines do fountain, till all the machines in fountain.

⓬M-LR B: from middle to left & right side increase two machines do fountain,till all the machines in fountain.

⓭HIGH1/2/3: do special effects can adjust fountain height, will show different fountain height press every-time.

⓮+NO.-: the number of machines be adjustment, how many machines you need used, then adjust the same number as used, the maximum add to fifteen machines.

5. Operation Instruction

There have two operate modes: DMX 512 console, Remote controller.
Please ensure sufficient consumables before use; After added consumables, cover the rubber plug (don't add to wrong fountain hole)
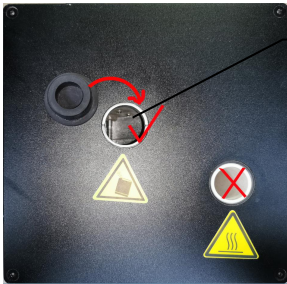

The hole add consumables

1) Use remote do normal fountain:

❶ Short press "Power" 1second to connect the machine, the display show "FHH" that be connected successful.

❷ Press "HEAT ON/OFF" start to heat till green indicator light always in lighting. (The display will show real-time temperature)

❸ Press "HIGH1/HIGH2/HIGH3" do fountain.

❹End of event -- Press "CLE" do clean powder (cleaning operation refer to point 7)

The diagram as follows:

❶   ❷   ❸   ❹
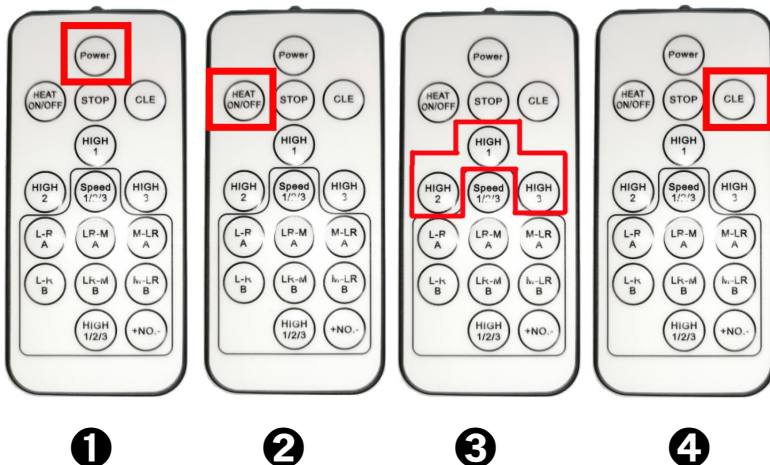
2) **Use remote do special effects fountain:**
❶ Press "Power" to connect the machine, the display show "FHH" that be connected successful.

❷To adjust each machine special effects address code by each machine address code button as picture show ; The display will show number or letter(A、B、C、D、E、F are correspond number10 to 15 respectively), like below picture show "3" means this is the third machine.

❸Press "+NO.-"adjust the number of machines be used, the display will show number or letter(A、B、C、D、E、F are correspond number 10 to 15 respectively), as below picture show the right number "4" means total machines qty, number must be adjusted to meet you need used machines qty.

❹ Press "Heat ON/OFF" button start to heat, till green indicator light always in lighting, then can do fountain, the display will show heating temperature.

❺Press special effects A or B buttons will have related special effects.

❻End of event -- Press "CLE" do clean powder (cleaning operation refer to point 7)

Eg: there have eight machines do special effects, then the programme will show as below:

    F18   F28   F38   F48   F58   F68   F78   F88

### 3) Console operation(Occupied 2 channels):

❶Connect 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.

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

1通道推到顶加热

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

❸Push the second channel do fountain.

2通道喷花
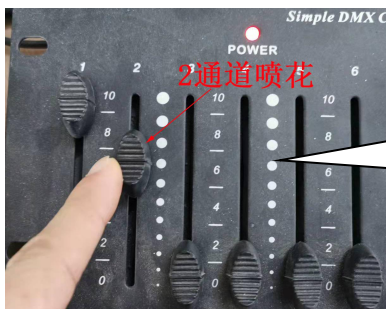
2nd channel do fountain (adjust the fountain height from up to down)

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

1通道推到221-239之间

1st channel down a little bit clean powder (between 221-239)

Remark: The detail channel instruction , pls refer to attached channel operation; if need use console do special effects, then pls do programme by yourself.

6．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.

7．Clean and Maintenance

1)Clear powder：Pls must do Clear Powder after each events used, avoid be stuck by inside powder for next use. The series of products designed two automatic modes of cleaning remaining consumables.
Operation step: When the machine still in the preparatory state after the event, clean the powder directly (remote controller press button CLE; DMX console use 1st channel push number between 221-239). The automatic cleaning time is 30 seconds, also can stop the cleaning in advance by manually (remote controller press HEAT button, the console to stop the cleaning, push number between 1-221 in 1st channel). The equipment will

jump to non-working state automatically after cleaning.

If you need to save the equipment, please pour out the remaining powder inside for separate storage after cleaning, avoid to affect the next use of the remaining powder affected by moisture.
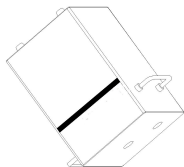
2)Dust net cleaning： Please clean the dust net regularly, to avoid block the dust net and influence heat dissipation of machine. (The dust screen can be removed directly from the outside)
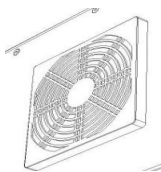
4) **External cleaning：** Please wipe the machine gently with soft cotton, to avoid scratch the machine housing.

8. After-sales

1) Warranty：1 Year (Subject to the date of manufacture)
2) Each machine is affixed with the factory code. The factory code shall be provided when enjoying the warranty service. It is invalid if torn.
3) 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	1：Check 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	1：Check the cooling fan. 2: stop heating and operating, restart after 10 minutes.
E04	Feed motor overcurrent protection	Check whether the feeding motor works normally and whether the feeding motor is stuck
E05	The sensor is faulty	1：Check 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

Note：when the fault light is on, pls turn off the power of machine in time, to avoid extra damage, and users are expected to restart the machine until the fault light is off.

9．Warnings and Cautions

	Warning: High temperature warning, high temperature at exit.
	The hole for adding powder
	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.
Cleanin g	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) 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.

2) Max connection is 6 pieces via power connecting cables, too many devices work together will cause damage or fire.

3) If there is no spark out with enough consumables or other abnormal situation, pls stop running machine and contact after-sale service for help.

4) 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 housing.

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

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

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

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

Attached as below

Ground Big   750W
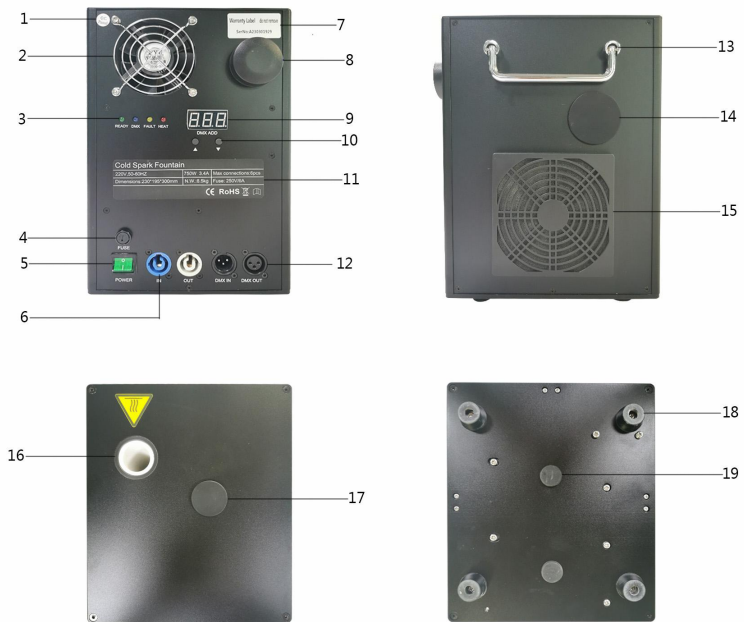
Outlook function description					
1	QC	8	Remote receiver signal	15	Dust net
2	Cooling fan	9	Display	16	Spray hole
3	Indicator	10	Adjust buttons	17	Powder hole
4	Fuse	11	Parameter label	18	Pads
5	Power switch	12	DMX port	19	Cleaning hole
6	Power port	13	Foldable handle		
7	Factory code	14	Access hole		

Product Parameters			
Working Height	1-5m	**Interface**	Double DMX input, Double AC power
Fountain direction	Up	**Control mode**	DMX / Remote
Working Temperature	-10℃-50℃	**Housing material**	Aluminum
Heating Power	750w 6.8A(110V) 750w 3.4A (220V)	**N.W**	7.8kg
Fuse	110V/10A, 220V/6A	**Size**	220*250*310mm

DMX Channel（2 Channels）					
1st channel	0-10	11-220	221-239	240-255	
Function	Pre-heat turn off	Emergency stop	Clear Powder	Pre-heat turn on	
Display	Add. code	E57	CLE	0-500	
2nd channel	0-15	16-39	40-63	64-87	88-111	112-135
Function	Turn off	Fountain 1	Fountain 2	Fountain 3	Fountain 4	Fountain 5
Display	OFF	F1	F2	F3	F4	F5
2nd channel	136-159	160-183	184-207	208-231	232-255	
Function	Fountain 6	Fountain 7	Fountain 8	Fountain 9	Fountain 10	
Display	F6	F7	F8	F9	F10	