

Stage Effect Machine

User Manual

Please read this manual carefully before operating this product.



CSF650

Manual

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.

安全性

警告和注意事项



该标志目的为提醒用户注意危险，并为用户能安全、有效操作喷花机提供重要信息。安全声明的范例描述如下：

警告：该警告提醒您注意有害或潜在的危险的操作，已给出危险描述及忽略产生的后果。

眼部保护



眼部保护警告标志指出在靠近喷花机操作时必须保护好眼睛。

电压伤害



警告：当设备及控制器使用时内部存在危险电压，有电击伤害的风险。

未经授权人员，请勿擅自打开喷花机和控制器，或移除（调整）喷花机和控制器内部的任何零部件。仅受过专业培训的工程师才可打开设备和控制器。

防潮警告



警告：防潮警告提示操作者应该保持喷花机和控制器干燥，不要在下雨和下雪天使用。

清理

演出结束后，应观察喷花口内是否有结瘤现象，如果有，需要清理干净，结瘤会影响喷花效果，甚至会损坏喷花机。

演出结束后，应使用清料功能清除喷花机管路余料。

运输前，应将喷花机储料槽内的余料倒出，余料应保存在干燥密封环境

Security Considerations:

1. Unauthorized repair is prohibited, or else it may cause serious accident.
2. Keep Sparctic dry and do NOT use in rain or snow.
3. Make sure the hopper lid is well covered when use Sparctic. 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 Sparctic. Make sure sparks shooting out from Sparctic 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 Sparctic.
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.

安全注意事项:

1. 禁止未经授权的维修，否则可能导致严重的事故。
2. 请保持机器干燥，请勿在雨天或雪天中使用。
3. 使用机器时，请确保料斗盖已盖好。偶然燃烧复合钛只能用沙子扑灭。 复合

材料应存储在干燥的密封环境中。

4. 保持听众和易燃物品与机器的最小距离为 3m。 确保从机器射出的火花不能到达任何物体。
5. 有必要在演出前后清洁残留在管道中的复合钛。 每次显示后，检查喷嘴中是否残留有复合钛。 如果有，请清理干净，否则会影响机器使用损坏机器。
6. 最大连接数为 6 件，过度连接可能导致损坏甚至起火。
7. 为更好地散热，请勿阻塞进气口和出气口。
8. 禁止盖喷嘴。

Parameter(machine):

Model:	1(DMX control mode) 2(DMX+remote control mode)
Working Height:	1-5 meters
Working Temperature:	-10℃-50℃
Power:	650W 4.6A (110V version) 650W 3.6A (220V version)
Fuse:	110V/10A, 220V/6A
Control:	DMX/remote control+DMX
Net Weight:	6.5KG
Dimensions:	26x18.5x25CM
Max connections:	6 pieces
Warranty:	1 year
Package:	Carton box Flight case(2 in 1) Flight case(4 in 1)

参数（机器）：

工作模式	DMX512 模式+遥控模式
工作高度	1-5 米
工作温度	-10℃-50℃
功率	650W 4.6A (110V 版本) 650W 3.6A (220V 版本)
保险	110V/10A, 220V/6A
净重	6.5KG
尺寸	26x18.5x25CM
最大连接数	最多 6 台
质保	1 年

Parameter(consumables):

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

参数（耗材）：

耗材:	钛合金颗粒
净重:	200 克
用法:	总共 15 到 20 分钟的火花射击
包裹:	真空包装

DMX 512 setting

The first channel:	Functions:	Digital display
0-10	Pre-heat OFF	
11-220	E-stop	E57
221-239	clear powder	CLE
240-255	Pre-heat ON	

The second channel:	Functions:	Functions:
0-15	Pre-heat OFF	OFF
16-63	working height 1	F1
64-111	working height 2	F2
112-160	working height 3	F3
161-208	working height 4	F4
209-255	working height 5	F5

DMX 通道模式

第一通道	功能	数码管显示
0-10	预热 关	
11-220	紧急停止	E57
221-239	清理耗材	CLE
240-255	预热 开	
第二通道	功能	
0-15	关	OFF
16-63	喷花高度 1	F1
64-111	喷花高度 2	F2
112-159	喷花高度 3	F3
160-207	喷花高度 4	F4
208-255	喷花高度 5	F5

➤ 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 1st channel. When it is heating, LED screen shows the temperature.)

操作面板说明:

READY: 绿灯 闪烁表示系统准备工作中，常亮表示系统准备就绪

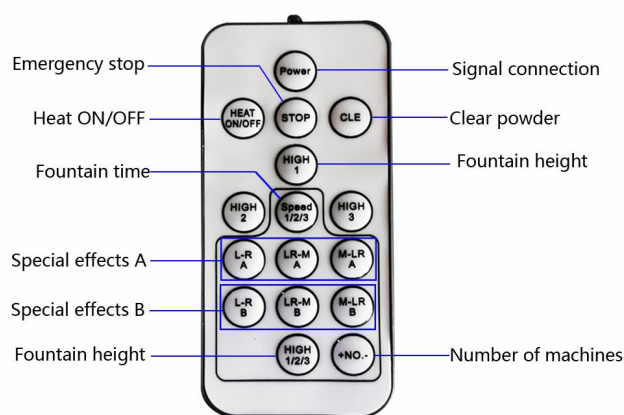
DMX: 蓝灯 闪烁表示有 DMX 信号，无显示为信号断开

FAULT: 黄灯 有错误时亮灯

HEAT: 红灯 加热时常亮


LED 屏幕显示 DMX 状态和工作状态。（“向下”和“向上”按钮调节 DMX 通道）。例如，“001”，它正在连接第一个通道。加热时，LED 屏幕显示温度。）

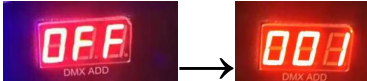
Remote control instructions



- 一) **Suitable models instruction:** this remote controller be suitable for all of models with remote function.
- 二) **Suitable machines instruction:** this remote also can control previous machines, but just do the basic control functions, cannot realize special effects, that functions show in black line.
- 三) **Buttons usage instruction:** the remote controller include two parts, one for basic functions, another for special effects(the functions within black line)

①Power: (signal connection) short press 1second is connect the machine, the display will show “FFF” after connected, then “FFF” will change to 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:  The diagram shows two red LED displays. The first display shows 'FHH' with 'DMX ADD' written below it. An arrow points to the second display, which shows 'FIF' with 'DMX ADD' written below it.

Signal unconnected:  The diagram shows two red LED displays. The first display shows 'OFF' with 'DMX ADD' written below it. An arrow points to the second display, which shows '001' with 'DMX ADD' written below it.

②HEAT 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.

③STOP: (Emergency stop) stop do fountain.

④CLE: (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)

⑤HIGH1/HIGH2/HIGH3:(Fountain height) high 1 - fountain lowest, high 3- fountain highest

⑥Speed: (Fountain time adjustment) multi-machines do fountain effects, the fountain time of each machine can be adjusted by short press 1-3seconds, which can be adjusted during fountain.

⑦L-R A:from left to right each machine do fountain on sequence.

⑧LR-M A:from left & right side to middle, there have two machines do fountain at the same time.

⑨M-LR A:from middle to left & right side, there have two machines do fountain at the same time.

⑩L-R B:from left to right increase one machine do fountain, till all the machines in fountain.

⑪LR-M B: from left & right side to middle increase two machines do fountain, till all the machines in fountain.

⑫M-LR B: from middle to left & right side increase two machines do fountain,till all the machines in fountain.

⑬HIGH1/2/3: do special effects can adjust fountain height, will show different fountain height press every-time.

⑭+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.

四) Operation do normal fountain:

- 1) Press “power” to connect the machine.
- 2) Press “HEAT ON/OFF”start to heat till green indicator light always in lighting.
- 3) Press “HIGH1/HIGH2/HIGH3”do fountain.

五) Operation do special effects fountain:

- 1) Press “power” to connect the machine.
- 2) To adjust each machine special effects address code by address code button as picture



show; the display will show the number or letter (A、 B、 C、 D、 E、 F are correspond number 10 to 15 respectively) , like below picture show “3” means this is the third machine.



3) Press “+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.

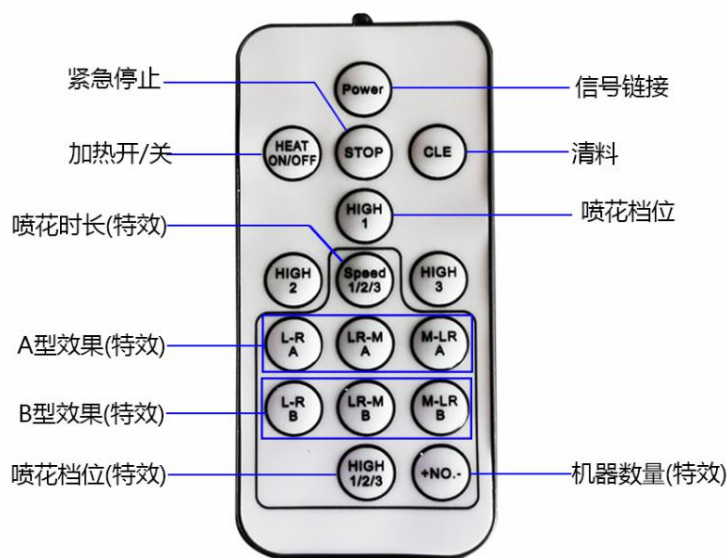


- 4) Press “Heat ON/OFF” button start to heat, red indicator light will lighting, the display will show heating temperature.
- 5) Press special effects A or B buttons will have related special effects,it should be do based on finished heating,till the green indicator light always in lighting.

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

F18 F28 F38 F48 F58 F68 F78 F88

遥控说明

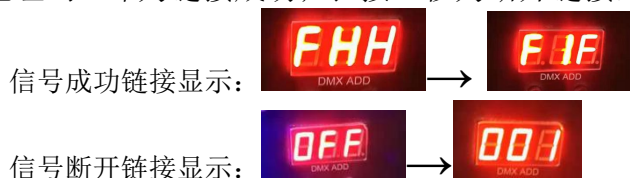


一) 适用机型说明: 多功能遥控适用于所有带遥控功能的机型

二) 适用机器说明: ; 此遥控也可兼容之前的机器, 但是只能达到基础控制功能, 不能实现特效喷花效果(既黑色线框内按键无效)

三) 按键使用说明: 遥控分为两部分, 基础功能键; 特效喷花功能键(黑色线框内)

①Power: (信号链接) 短按 1 秒为链接机器, 链接后显示屏显示 FHH (随即会转显示特效地址码) 即为链接成功; 长按 3 秒为断开链接, 显示屏显示为 OFF (随即转显示 001) 如下图:



②HEAT ON/OFF: (加热开/关) 按一下为开始加热, 红色指示灯会亮, 显示屏会实时动态显示加热温度; 长按 3 秒为停止加热; 加热指示灯灭, 显示特效地址码

③STOP: (紧急停止) 停止运行喷花

④CLE: (清料) 机器会自动清料 30 秒(清料前请将料盒内粉末倒出)

⑤HIGH1/HIGH2/HIGH3: (喷花档位) 1 档喷花高度最低, 3 挡喷花高度最高

⑥Speed: (喷花时长调节) 多台机器做喷花效果时, 每台机器喷花的时间长度(1-3 秒) 短按一下可调节, 喷花过程中可调节

⑦L-R A: 从左往右依次单台单次喷花

⑧LR-M A: 从左右两边依次往中间 2 台同时单次喷花

⑨M-LR A: 从中间往左右两边依次 2 台同时单次喷花

⑩L-R B: 从左往右单台递增持续喷花

- ⑪LR-M B: 从左右两边往中间 2 台递增持续喷花
- ⑫M-LR B: 从中间往两边 2 台递增持续喷花
- ⑬HIGH1/2/3: 特效喷花时档位调节, 单按一次可切换喷花高度
- ⑭+NO. - : 喷花机数量调节, 既活动特效机子有多少台就调节为多少台 (最多为 15 台)

四) 常规喷花操作流程:

- 1) 按 (power 键) 链接机器;
- 2) 按 (HEAT ON/OFF) 开始为机器加热;
- 3) 按 (HIGH1/HIGH2/HIGH3) 开始喷花; 需加热完成, 绿色指示灯常亮;

五) 特效喷花操作流程:

- 1) 按 (power 键) 链接机器;



2) 通过按每台机器上的地址码按钮, 依次调节每台机器特效地址码; 显示屏会显示对应数字或字母 (A、B、C、D、E、F 分别对应 10 到 15) 如下图中间数字 3 既代表这台机器编码为第 3 台



4) 按 (+NO. -键) 对特效喷花机器数量进行调整; 显示屏会显示对应数字或字母 (A、B、C、D、E、F 分别对应 10 到 15) 如下图右边数字 4 既代表喷花机总数为 4



- 4) 按 (HEAT ON/OFF) 开始为机器加热; 显示屏实时显示加热温度, 加热红色指示灯会亮
- 5) 按 (特效 A 型或 B 型键按钮) 实现对应特效喷花; 需加热完成, 绿色指示灯常亮

例如: 如果有 8 台机子做特效喷花效果, 则机器编程如下

F18 F28 F38 F48 F58 F68 F78 F88

Fault light (yellow) display and treatment method

Display content	cause of issue	Approach
E01	Heating failure	1: Check whether the heat dissipation of the heating plate is normal, 2: Replace the heating plate
E02	Uncontrolled heating	1: Replace the heating plate
E03	The internal temperature of the machine is extremely high	1: Check the cooling fan, 2: Stop heating and spraying, and restart after 10 minutes
E04	Fan does not turn	1: Check whether there is any foreign matter falling into the spray nozzle; 2: Replace the fan motor
E05	Bad sensor	1: Check the sensor socket, 2: Replace the sensor
E06	Anti-tilt protection function	Shut down and restart

Note: After all the fault lights are on, you need to restart the machine until the fault lights are off before the machine can work normally.

显示内容	故障原因	处理方法
E01	加热失败	1: 检查加热板散热是否正常, 2: 更换加热板
E02	加热不受控制	1: 更换加热板
E03	机器内部温度超高	1: 检查散热风扇, 2: 停止加热和喷花, 10 分钟后重启
E04	风机不转	1: 检查喷花口是否有异物掉进去, 2: 更换风机电机
E05	传感器坏	1: 检查传感器插座, 2: 更换传感器
E06	防倾斜保护功能	关机重启

注意: 所有故障灯亮后, 需要重启机器直到故障灯灭掉机器才能正常工作。

Power cable connection:

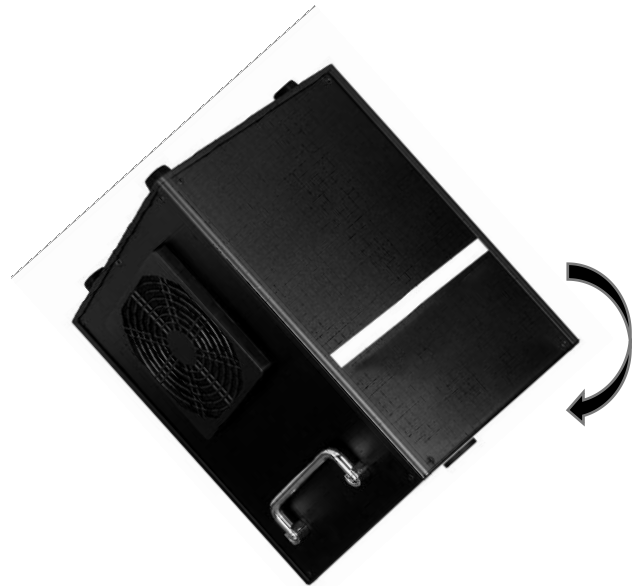
For convenient use, there are power supply cable and power supply ex-cable. power supply ex-cable can achieve multiple devices connected, and maximum cascade is

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
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.

材料清洁（重要注意事项）：

- 1.使用后，请倒空机器上的粉并清理残留物（DMX 控制地址：221-239）。
- 2.如果残留卡住，则必须打开侧边胶盖并逆时针手动旋转链条。
- 3.如果机器在使用后未经清洁就停止工作，我们将不提供免费保修。

除尘（重要注意事项）

- 1.取下防尘网以清洁灰尘。
- 2.拔下机器下方的两个插头并摇动

警告与安全事项

- 1) 每次喷花时间请勿超过 30 秒，连续喷花时间太长会导致内部急剧升温，造成永久损坏。单次长时间喷花后，应注意短时间停顿后再进行下一次喷花。
- 2) 喷花机持续喷花超过 30 秒后会自动关闭，如需继续可再次触发喷花功能。
- 3) 单根标准喷花机电源（喷花机对连电源线）最大只允许串接 6 台喷花机，串接过多会导致损坏或火灾。
- 4) 如使用中，喷花口没有火花喷出，如果料盒里面粉末足够那么就有可能是齿轮卡住了，应关闭预热，手动转松齿轮直到齿轮转动很顺畅，然后倒掉料盒里面的粉末加热喷花，把管道里面的残余粉末喷出来，然后加入粉末再次加热和喷花，如问题还未解决则联系售后。
- 5) 当喷花完不要立即断电，应该关闭加热，并在通电开机的情况下让散热风扇把机器内部热风抽出，不然内部热量迅速传到机壳表面。
- 6) 操作人员应距离喷花机 3-5 米。
- 7) 加料前请确保设备处于关闭状态。
- 8) 如耗材被意外点燃，请使用沙土熄灭，请勿用水。
- 9) 请将耗材储存于阴凉干燥密封的环境。
- 10) 由于使用不当或人为因素造成的损坏不在保修范围。
- 11) 最终解释权归本司所有。

