



V1.0

# User Manual

# Sparkular mini

Liuyang Xiaowen Electronic Technologies Co., Ltd

# User Manual

## Sparkular mini

- ★ Please read this manual carefully before operating this product.
- ★ This manual contains the warranty card, please keep it well.

### 1-1 Security Considerations .

- » Unauthorized repair are prohibited, it may cause serious incident.
- » Keep SPARKULAR mini dry and do NOT use in rain or snow.
- » Make sure lid of feeding hopper are well covered when use Sparkular mini. Accidentally Burning of Composite Ti can only use sands to extinguish. Composite Ti should keep away from moisture and stored in a dry sealed environment.
- » Keep audience and flammable material at a minimum distance of 3m from SPARKULAR mini. Make sure sparks shoot out from Sparkular mini can NOT touch any objects.
- » Clear material for Sparkular mini is necessary both before the show and after the show, to clear the Composite Ti remains in the pipe. Check whether there are Composite Ti aggregate in the nozzle after each show, if any, please clean it up, or it will affect the shooting effect or even damage Sparkular mini.
- » The Sparkular mini power supply cable (sparkular mini power supply EX-cable) maximum allowed cascade for Sparkular mini is 6pcs, exceed connecting may result in damage or even cause fire.
- » For better heat dissipation, block the air intake and air outlet is prohibited.
- » Cover of nozzle of Sparkular mini is prohibited.

Sparkular Mini Model No.BT06		
	Parameter	
	Size	168×180×228mm
	Weight	4.5kg
	Input Parameter	200-240VAC, 50/60Hz
	Working Power	300w
	Working Temperature	-10℃~ 50℃
	Casing	ABS
	Fountain Height	2.0m~3.5m, Depend on different type of composite Ti
	Interface	Double DMX input interfaces, double AC power interfaces

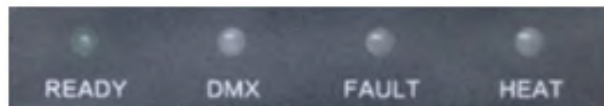
**Advantages :**

- » Integrating wireless technology, Not exposed, anti-collision.
- » One button start.
- » Tilt protection function. More secure.
- » Sophisticated design, light weighted and portable.



### Operation Panel:

LCD information display area, showing operate menu and working status of machine.



### Light emitting diode display area :

**READY** : After turn on machine, it will automatically preheat around 5 minutes, when the "READY" green light turns from flashing into long on, indicates that the machine is ready to work.

**DMX** : Flashing shows that DMX signal is connected, otherwise is without signal.

**FAULT** : When any malfunction , the light turn on.

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



### Control button area :

**MENU** : Short press to switch interface, press for 3 seconds can switch to the advanced setup interface.

**-** : Parameters down.

**+** : Parameters up.

**ENTER**: Confirm and save parameters.

### Radio frequency identification area :

» Composite Ti with RFID card, swiping cards used to identify parameters and types of granules.

» Please note that granules RFID card can increase the single machine specific working time. The card is disposable, one card can only use one time.



## Interface

### Main Interface:



First line : Display DMX address is “1”.

Second line : Display the present inner core temperature and the temperature progress bar; displays remaining time is 7 minutes and 24 seconds.

### Error informations display table :

Error Informations	Introductions
E0 System IC	System error.
E2 Temp. Sensor	Temperature sensor was damaged.
E3 P Temp. Over	Chassis temperature too high lead to shut down.
E4 Time Remain	Insufficient granules or remaining time, please swiping time card.
E5 K Temp. Over	Inner core temperature too high lead to shut down
E6 Heat Fail	Heating failed.
E7 Tip Over	Dumping alarm when machine is tilted at less than 45 degrees. machine stop working when tilt alarm starts.

### Setting interface :

Press “MENU” to enter the Setting interface, press the “MENU” button to enter different options until you return to the main interface.

Options	Range	Instructions
Set DMX Address	1-512	Set the DMX address. machine become a wireless host and can send out DMX signal when it’s address is “1++”.
Wireless Control	ON/OFF	Wireless function switch. you can match codeWhen shows “ON”
Manual Fountain	ON/OFF	Manual fountain switch , for testing purposes only.
Auto Clear Delay	0.1-0.9s	Automatic clear material settings.

## Advanced menu :

Press “MENU” 3 seconds to enter the advanced setup interface, press MENU key to enter different options, press MENU till 3 seconds to return to the main interface.

Options	Range	Instructions
Set Temperature	500-610	Setup inner Core temperature.
Auto Heat	ON/OFF	Auto preheat function switch after turn on machine
Auto Heat	70-100	Adjust the sparks density.
Mode Selection	Factory Mode/ User Mode	Factory Mode is factory debugging mode, User Mode is using mode
Tip Over Error	ON/OFF	Tilt function switch.
Default Parameter		Press “ENTER” to restore all parameters to the factory settings.

## Use:

### 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, maximum cascade is 6pcs. All power plugs are industrial plug with lock, it need to toggle snap and rotate when using.
- » If you use mobile power plate, be sure to use good quality and match rated power products. 6 pcs machines requires around 2000 watts, cores should be over 1.5 square.

### Wireless remote control mode :

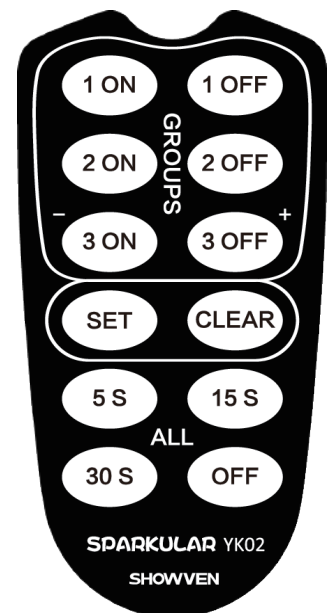
- » If the remote control cannot work, please check whether wireless function was turn on. Press MENU to switch to wireless control setting , menu is set to “ON” , press “ENTER”. This interface can also be matching code with remote controller.



Wireless Control  
ON

- » Sparkular mini can controlled by both DMX and remote controller, when there are DMX signal input, wireless remote controller will not work.
- » When using remote control you need to pull out the antenna.

1 ON	Address "1" ON	1 OFF	Address "1" OFF
2 ON	Address "3" ON	1 OFF	Address "3" OFF
3 ON	Address "5" ON	1 OFF	Address "5" OFF
SET	When use different remote control	CLEAR	Automatically clean material for 3 seconds
5 S	All Starts 5 seconds	15 S	All starts 15 seconds
30 S	All Starts 30 seconds	OFF	All stop



### Attention:

- » The first group machines correspond to DMX address "1", the second group DMX address is "3", the third DMX address is "5", remote controller controls 3 group machines. It also can set all Sparkular mini address as "1".
- » When the lamp is not lit or become weak on the remote controller, replace the battery. It is better to take battery out when transporting to prevent consumption of battery power by unmeant press of button.

### Battery model: 12V 23A

- » When the machine is occasionally not working, may be caused by interference, please press the start button again.
- » Wireless control is easy influenced by interference, it is suggest to stay as close to machine as possible when use remote controller, and machines cannot use metal shielding.

### Wireless host Sparkular mini mode (requires communication cables):

In occasion of strong interference, using the wireless host can avoid interference, ensure stable control. Set the first unit of Sparkular mini DMX address into "1++", this machine address is "1", but it can also output DMX signal and turns into wireless host Sparkular mini. Use communication cables to connect all the Sparkular mini, the host Sparkular mini will receive the signal from remote controller and transfer to all other Sparkular mini via communication cable to realize stable signal transmission.

**Cable DMX mode :**

When using the DMX controller, the system takes 2 channels

The First channel	Functions
0-15	Fountain OFF
16-255s	Fountain ON
The second channel	Functions
60-80	Clear Material
20-40	Emergency Stop
0-10	Pre-heat OFF
240-255	Pre-heat ON



## Warranty instructions

▲ Sincere thanks for your choosing our products, you will receive quality service from us.

▲ The product warranty period is one year, If there is any quality problems, we can exchange a brand new same model machine to you within seven days after receive the product.

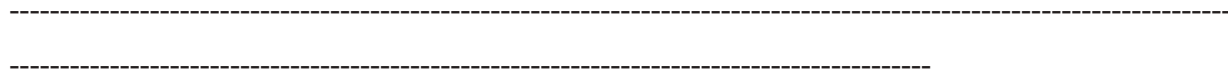
▲ We will offer free of charge maintenance service for machines which with hardware malfunction (except for the instrument damage caused by human factors) in warranty period. Please don't repair machine without factory permission.

**★ Below situation NOT included in warranty service:**

1. Damage caused by improper transportation, using, management, and maintenance, or damage caused by human factors;
2. Disassemble, modified or maintenance products without Showven's permission;
3. Damage caused by external reasons (lightning strike, power supply etc);
4. Damage caused by improper installation or use;

For product damage not included in warranty range, we can provide paid service.

Invoice and warranty card are necessary when asking for service from SHOWVEN.



### Warranty card

Product Name:		Serial NO.:	
Purchase Date:			
Contact Number:			
Address:			
Customer Feedback Information:			
Actual malfunction:			
Maintenance details:			
Maintenance person:		Maintenance Date:	



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