

Rotating flame machine

2024/6/20



- ★ Please read this manual carefully before use
- ★ Including warranty card, please make sure to keep it properly

▲ **precautions**

- Do not open the shell for repair on your own
- Please confirm if the power supply voltage matches the rated voltage of the equipment
- It is not allowed to add fuel while powered on
- Please pay attention to the usage environment. The safe distance has been marked on the device
- There must be no water in the fuel tank of the equipment
- If firefighting is required, use a carbon dioxide fire extinguisher
- Please make sure to use high-quality professional flame oil, otherwise there may be malfunctions or dangers, and do not add any other materials to the oil drum
- The operator should be able to directly see the status near the equipment. When there is danger, the performance can be terminated immediately, which is the safest approach

- The device cannot be used for purposes other than manufacturing and design purposes

▲ **foreword**

Thank you for using our shaking flamethrower product. Before use, we recommend carefully reading the instruction manual to ensure your safety and maximize the performance of the equipment, as well as extend its service life. If you have any questions about usage, please contact our company. The personnel operating the equipment must have relevant professional knowledge, including correct use, maintenance, and repair of the equipment defined in the instructions

▲ **Disclaimers:**

Not responsible for accidents and damages caused by the following reasons

- 1 : Ignore the warning displayed in the flamethrower or this document**
- 2 : For purposes and environments other than those described in this article**
- 3 : Using non original spare parts, insufficient maintenance, etc**
- 4: Accidents or damages caused by unauthorized dismantling of equipment**
- 5 : Improper use of equipment**

▲ Functional Features

- Height of 8-10 meters under windless conditions
- Independently developed control system, precise flamethrower
- Stainless steel shell, sturdy and durable without rusting
- Dual ignition system ensures ignition success rate
- IPX3 waterproof rating, can be used on rainy days
- Ground 180 °, suspended 210 °, diverse flame effects
- 3-core/5-core dual DMX waterproof interface
- Built in 10L fuel tank, no need for external piping
- Provide display menus in both Chinese and English

▲ Technical Parameter

product name	Rotating flamethrower
Scope of use	Outdoor and indoor
Use voltage	AC100-240V
power	380W
control mode	DMX512
Waterproof Level	IPX3 (rainproof design)
Consumables	Isopropanol; Isomeric alkanes G, H, L, M
Machine size	Length 55 CM, Width 36.3 CM, Height 44.3 CM
net weight	29.5KG
Fuel Capacity	10L
Fuel consumption	60 milliliters per second
Spray angle	210° (±105°)
spray height	8-10 meters (windless condition)



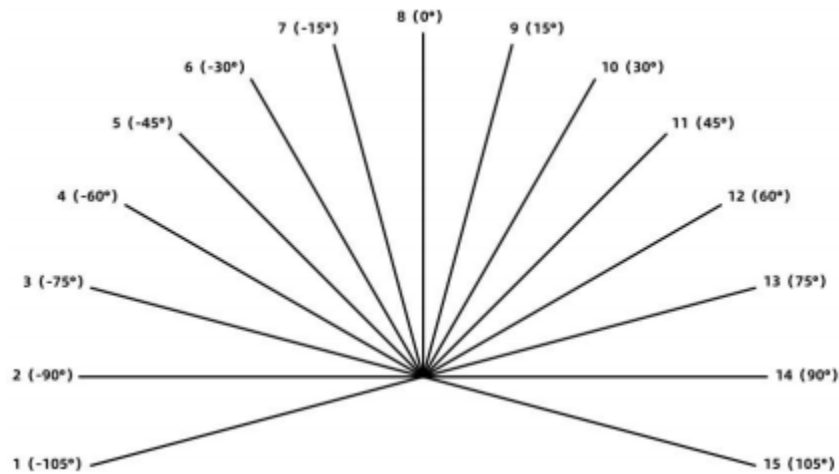
▲ Electric control surface

1. power input
2. Power Output
3. display
4. Electronic safety lock
5. insurance
6. power switch
7. 3-core DMX512 signal input/output
8. 5-core DMX512 signal input/output

Note: The flamethrower can only start spraying when the power switch and safety lock button are pressed simultaneously. When the safety lock button is not pressed, it is only in test mode and the flamethrower does not spray fuel

▲ Spray angle

The jet angle of the Spitfire is $\pm 105^\circ$. From the perspective of the Spitfire audience, it is defined as 15 jet angles, numbered from left to right as shown in the following figure



Attention: When the device is placed on the ground, the maximum spraying angle is 180° , and when the device is suspended, the maximum spraying angle is 210°

▲ LCD display operation panel



▲ Key function

“MENU” : menu

“UP” : DMX channel plus 0-255

“DOWN” : DMX channel minus 0-255

“ENTER” : confirm

▲ Electronic safety lock

The electronic safety lock remains stationary in test mode and cannot fire. When the electronic safety lock is pressed, the button will display a green light, and real flames can be sprayed at this time



▲ DMX512 control

thoroughfare	function	reference value1	function1	reference value2
channel 1	Angle Control	0-16	-105°	136
channel 2	Mode setting	0-99	Center Mode	100-200
channel 3	Sequence selection	Reference sequence table		
channel 4	ignition control	0-199	Stop ignition	200-255
channel 5	Refueling control	0-199	Pressure relief state	200-255

thoroughfare	function2	reference value3	function3
channel 1	0°	17-255	-105°- +105°
channel 2	Manual mode	201-255	sequence pattern
channel 3	Reference sequence table		
channel 4	ignite		
channel 5	Pressure state		

▲ serial number

-The 90 ° step value is 1, and for every 15 ° increase in step value, 1 is added

sequence	Starting value of DMX	DMX termination value	describe	Step starting value	Step termination value
0	0	5	Gradually shooting	1	7
1	6	11	Gradually shooting	2	13
2	12	17	Gradually shooting	2	7
3	18	23	Gradually shooting	2	12
4	24	29	Gradually shooting	3	7
5	30	35	Gradually shooting	3	11
6	36	41	Gradually shooting	4	7
7	42	47	Gradually shooting	4	10
8	48	53	Gradually shooting	5	7
9	54	59	Gradually shooting	5	9
10	60	65	Gradually shooting	7	1
11	66	71	Gradually shooting	7	2
12	72	77	Gradually shooting	7	3
13	78	83	Gradually shooting	7	4
14	84	89	Gradually shooting	7	5
15	90	95	Gradually shooting	9	5

sequence	Starting value of DMX	DMX termination value	describe	Step starting value	Step termination value
16	96	101	Gradually shooting	10	4
17	102	107	Gradually shooting	11	3
18	108	113	Gradually shooting	12	2
19	114	119	Gradually shooting	13	1
20	120	125	Swing long jet	13	7
21	126	131	Swing long jet	11	3
22	132	137	Swing long jet	7	13
23	138	143	Swing long jet	7	1
24	144	149	Swing long jet	3	11

▲ Set DMX address code

Set the address code for the flamethrower as follows:

Spitfire machine serial number	DMX address code
1	1
2	6
3	11
4	16
5	21
6	26
7	31
8	36
9	41
10	46
11	51
12	56
13	61
14	66
15	71
16	76

17	81
18	86

Attention: Incorrect DMX address code may cause flamethrower to lose control

▲ Quick operation instructions

1、 When installing the machine, it can only be installed horizontally on the ground or a sturdy support, ensuring that the machine is securely installed and equipped with a safety lock

2、 Add fuel, please add the original factory specific flame oil. Using harsh flame oil may cause poor performance, blockage, and other issues with the flame thrower

3、 Plug in the power cord and connect the signal cable

4、 Turn on the power switch, please confirm that the electronic safety lock is in an inactive state before turning it on

5、 Set the DMX address code, the flamethrower occupies 5 channels. For detailed information, please refer to page 9 of this manual

6、 Open the electronic safety lock, a green light will be displayed, and the flamethrower can be ignited normally

7、 Pressurization (5 channels pushed to the top, at 200-255)

8、 Ignition (4 channels pushed to the top, at 200-255)

9、 End, release pressure (5 channels pulled down, below 199)

10、 Close the electronic security lock, and the green light will turn off at this time

11、 Turn off the machine, remove the power and signal wires, and pour out the unused fuel from the tank to collect it. After the machine nozzle cools down, put away the equipment

▲ maintenance

1、 It is recommended to have the equipment run at least once a month to maintain optimal performance and equipment condition

2、 After use, spray the fuel in the equipment pipeline clean. The oil pot should not be filled with water, and the equipment should not be drained of water, otherwise it will damage the internal parts

3、 When not in use, it is recommended to use the factory provided aviation case for installation to avoid direct sunlight and moisture

4、 The fuel tank should be kept dry at all times, and there should be no dust, leaves, or other debris entering. Except for fuel specifically designed for flame spraying, there should be no liquid or debris inside the fuel tank

5、 Before and after each performance, it is necessary to check whether there are any foreign objects on the ignition electrode. If there are, please clean them up in a timely manner

4、 Damage caused by incorrect installation or use by the user

Products that are not covered by warranty will be provided with paid repair services

★ When maintenance is required, please present the purchase certificate and warranty card

Warranty Statement

Sincere thanks for choosing this product. You will receive high-quality after-sales service provided by our company

The warranty period for this product is one year. If there is a quality issue within seven days of leaving the factory, it can be replaced with a product of the same model

During the warranty period, if the hardware malfunction is caused by the product itself, our company will provide free repair services for customers. Please do not disassemble and repair it yourself

★ The following situations are not covered by the warranty service:

- 1、 Improper handling, use, maintenance, or human damage by users
- 2、 Unauthorized disassembly of the product
- 3、 External factors (lightning strikes, water immersion, etc)

warranty card

Product Name:		Serial number:	
Purchase date:			
contact number:			
Address:			
Situation reflection:			
Actual malfunction:			
Processing details:			
Repair personnel:		Repair date:	