

USER MANUAL

uFlamer

V1.0

2021/03/23



USER MANUAL

uFlamer

- ★ Please read this manual carefully before operating this product.
- ★ Warranty card attached in the manual, please keep it well.

▲ Warning

- \ Unauthorized repair are prohibited, it may cause serious incident
- \ Make sure power supply is consistent with the rated voltage of the equipment, and the socket must be well grounded. Unplug and turn off the machine when not in use
- \ Before connecting the power cable, communication DMX cable should be well connected and ensure the command keeps at firing OFF status. And safety lock stays at test mode
- \ The device can only be placed horizontally. Safety distances are marked on the device (at least 15m in projection direction, at least 5m around the device)
- \ After turning on the device, no person allows to stay in the danger area. Ensure all persons that are part of the show are informed about the safety distance, risks and functions of the device
- \ Always have a CO2 fire extinguisher and an extinguishing blanket in case of need
- \ If there is any doubt as to the safety operation of the device in any circumstances, the device should be taken out of service immediately. Be sure the device is in good operating condition before use. If it fails to fire correctly, immediately shut down and check it accordingly
- \ Be sure to use high quality flame fluid, otherwise, it is easily led to failure or danger. Be careful when refilling the flame fluid tank. Please keep flame fluid away from heat source, sparks, fire or other possibility of ignition. Do not smoke!
- \ The operator responsible for the control of uFlamer must always have a clear view of the device, so that he/she can stop the show immediately when there is danger. The main AC power switch should be near the operator. So that the operator can turn off the power of all devices in case of abnormal
- \ The device shall not be altered and applied to other uses

Disclaimers:

SHOWVEN technologies Co., Ltd excludes liability for unsafe situations, accidents and damages resulting from:

1. Ignoring warnings or regulations as shown on the flamer or this manual.
2. Use for other applications or circumstances other than those indicated herein.
3. Changes to the flamer, including use of non-original spare parts.
4. Removed safety cover without authorization from SHOWVEN.
5. Use of this machine by unqualified or untrained personnel.
6. Improper use of machine.

▲ Foreword

Thanks for choosing uFlamer. Please read the following manual carefully and completely before operating this product. Operating according to instructions is very important for safety, and can prolong the service life of the machine

Strictly follow the instructions in the manual when operating uFlamer. If you have any doubts, please contact SHOWVEN technologies Co., Ltd by info@showven.cn

We assume the person who uses or comes in contact with the device are familiar with how the device should be handled. This includes proper use, maintenance and repair of the machine as defined in this user manual.

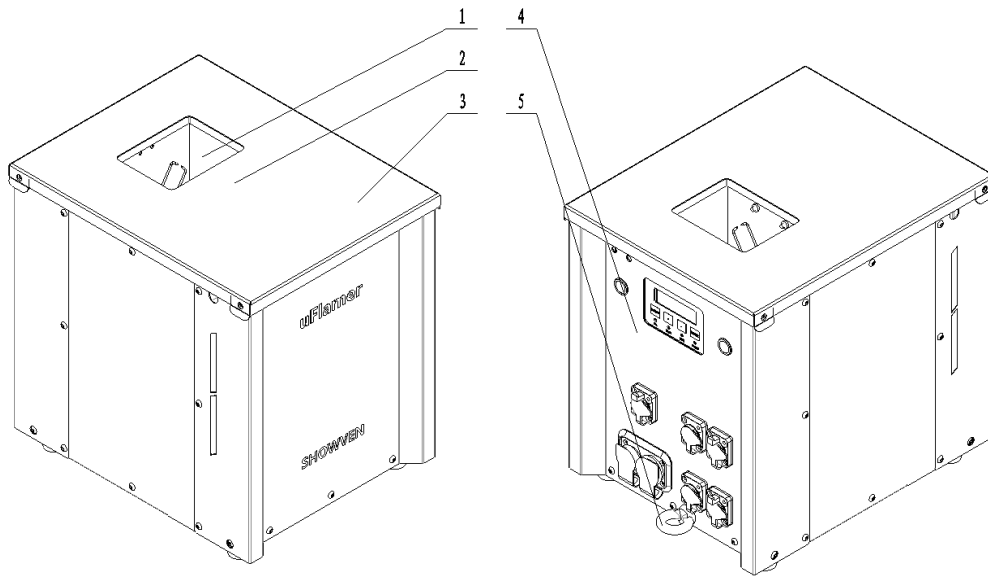
▲ Functional Characteristics

- \ Fluid driven vertical flamer original designed by SHOWVEN
- \ Flame up to 8-10m, indoor nozzle optional
- \ Super compact pumping system design, easy carrying
- \ Stainless steel housing, IPX3 waterproof design, reliable and durable
- \ Built-in 3.5L fuel tank, no external hose connection needed
- \ Double electromagnetic valves design for additional safety
- \ Safety lock with switchable test mode, safer for service
- \ Tilt protection, the tilt sensor will be activated when machine slant Over 45°
- \ Intelligent control system, safer for use
- \ Standard DMX control, compatible with all DMX console
- \ Neutrik®powerCON TRUE1 connectors
- \ Built-in battery, support 10min continuous firing or 3 days standby
- \ Fitted with fireworks igniter signal port, can be triggered by fireworks igniter
- \ Built-in wireless control with radio range up to 1km

▲ Technical Specifications

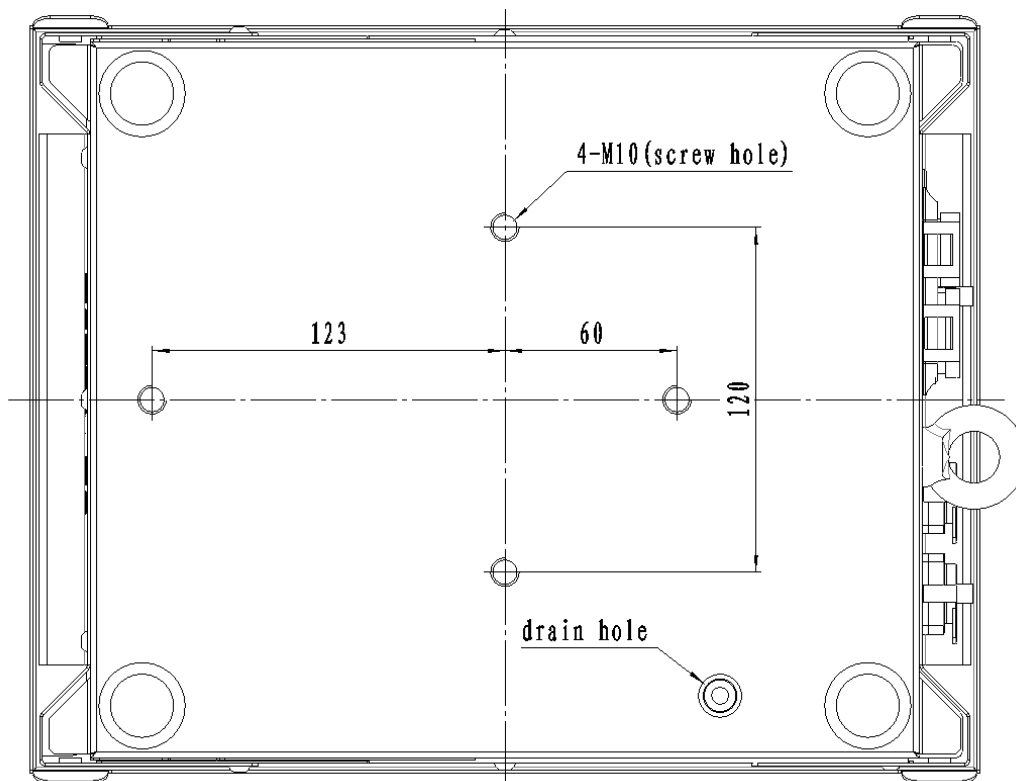
- \ Model: uFlamer™
- \ DIMENSION: 330×260×320mm
- \ WEIGHT: 14kg
- \ VOLTAGE: 100-240V, 50/60Hz
- \ POWER: 300W
- \ CONTROL: DMX\ INTERFACE: Waterproof 3-pin XLR IN/OUT
- \ FLAME HEIGHT: 8-10m (no wind)
- \ FUEL: ISOPROPANEL, ISOPAR-G,H,L,M
- \ FUEL TANK CAPACITY: 5L
- \ FUEL CONSUMPTION RATE: 60ml/s
- \ EFFECT DIRECTION: Vertical
- \ LGNITION: High voltage electron ignition
- \ BUILT-IN BATTERY: OPTIONAL
- \ WATERPROOF LEVEL: IPX4

▲ Structure of uFlamer

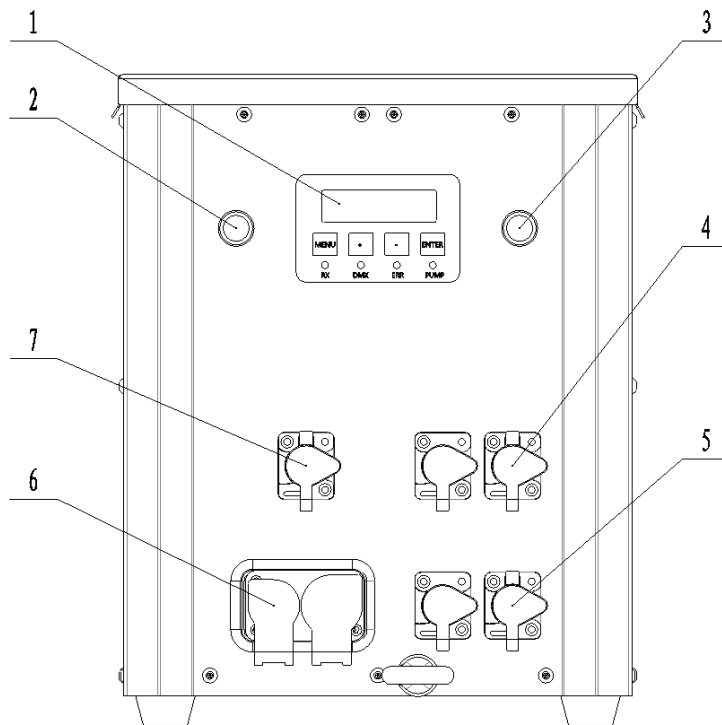


1. Firing Box
2. Top Panel
3. Fuel Bottle Area
4. Control Panel
5. Safety Loop

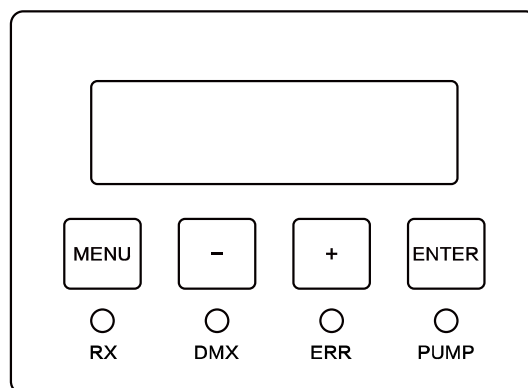
▲ Overview of Bottom Panel



▲ Overview of Control Pane



▲ Operation Panel



1. LED Display Area:

RX: Radio receiving (reserved)

DMX: DMX signal. Flash means DMX signal available, otherwise no DMX signal

ERR: Light on when there is an error

PUMP: Light on when pump is running

2. Button Functions:

MENU: Switch interface to setup parameter;

+: Parameter Up

-: Parameter Down

ENTER: Confirm and save parameters (screen will flash when parameters saved)

Note: screen display will switch to main interface if don't press button for a long time.

3. Welcome Interface :

uFlamer191129
X-F1190006

First Line: Product model and software version

Second Line: Equipment series number

4. Main Interface:

FIRE 1 M:2CH-P
P:75 V:13.6

Safe 2 M:2CH-P
P:75 V:13.6

DMX:2 M:2CH-N
P:70 V:13.6

First Line: Fire address and Safe address on the DMX ChannelMode(2CH-P); DMX address on the DMX ChannelMode(6CH / 2CH-N);

Second Line: Pressure75 (e.g. 100=10bar); V: 13.6 means internal voltage is 13.6V.

5. Alert Message:

Alert Message		Explanation
E0	Test Mode	Safety lock located at TEST MODE
	Factory Mode	DMX signal blocked in factory mode
E1 Pressure Err	Pressuriser for about 10s, pressure value failed to reach 100%, system will report E1. Possible fault: No fuel, pump failure, pipeline problem etc.	
E2 P Relief Err	Pipeline can't release pressure leads to pressure relief error. Possible fault: pressure release valve failure, pipeline problem or control system problem etc.	
E5 Voltage Err	Battery voltage>18V or <9V for continuous 5s, machine stops running. Possible fault: the battery is low	
E6 Tip Err	if the machine slant over 45°, it stops running, system will report E6	

6. Interface setup:

Press "MENU" to switch through setup menu:

DMX Channel Mode	Menu	Range	Explanation
6CH / 2CH-N	Set DMX Address	1~512	DMX address setup
2CH-P	Fire Address	1~512	Fire address setup
	Safety Address	1~512	Safety address setup

7. Advanced Interface:

Press "MENU" 3s enter advanced interface, press "MENU" to switch interface, press "MENU" 3s can back to main interface.

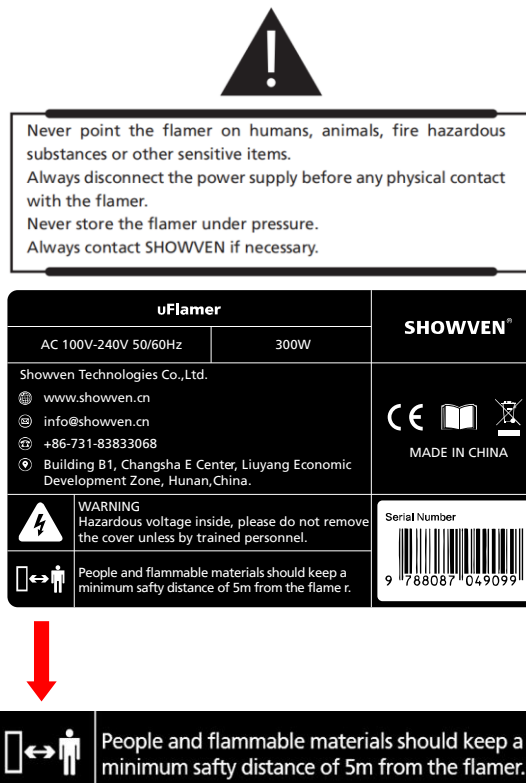
Items	Contents	Description
Drive Test	OFF / Pump / Igniter / Relief Valve / Jet Valve	
	1. Pump	Pump running 1s, if pressure reached the target value, the pump will not running.
	2. Igniter	Ignite 1s
	3. Relief Valve	Release valve will be on and off for 3 times

	4. Jet Valve 1	Safety lock located at user mode, release pressure for 5s, jet valve will be on and off for 3 times
	5. Jet Valve 2 (none)	
Language	English / Chinese	Language switch
Mode Select	Normal Mode / Factory Mode	Factory mode is for test in factory only
Tip setting	OFF / ON	Turn ON or OFF When turning on, if the machine slant over 45°, the flamer stops running, system will report E6
DMX Channel Mode	2CH-P / 6CH / 2CH-N	Change the DMX Channel Mode.
Default Parameter	OFF / ON	Reset default parameter settings

▲ Operation Instructions

1. Direction explanation

Please read the safety instructions printed on the top panel of uFlamer carefully.
Safety distances for uFlamer is at least 15m in projection directions and 5m around.





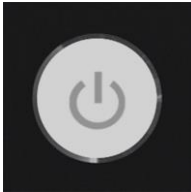

2. DMX ChannelMode selection for host controller ZK6200/ZK6300

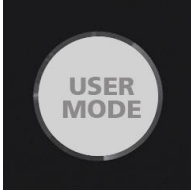



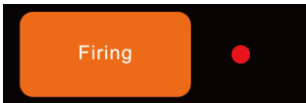

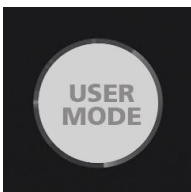
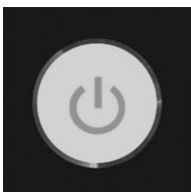
DMX ChannelMode	Host controller device selection	Host controller ZK6200/ZK6300 device setting	Note
2CH-P mode	--none--	Press F3 --Select device items--Confirm	--
▲ 6CH mode	FLAMER		Feedback the pressure value
2CH-N mode	SPARKULAR		Feedback the pressure value

▲ 6CH mode is recommended, when you use host controller ZK6200/ZK6300 for the show control.

3. Quick Operation Sheet for reference (Specialized for host controller ZK6200/ZK6300)

Immediately upon receiving the machine, carefully unpack the carton, check the machine received in good condition. Ensure safety operation of machine, please do following below operation procedures when operate uFlamer.

Operation step	Schematic diagram and explanation	Explanation
Installation	The device can only be placed horizontally, if placed on truss, please locked with extra safety ropes.	
Locate safety lock at TEST MODE	 <p>Press the button off, The LED is off.</p>	<p>Before operate machine please locate safety lock at TEST MODE.</p> <p>TEST MODE: operator can test the ignition of the flamer, but the fuel ejection function disabled, so there is no fuel eject.</p> <p>USER MODE: the device can generate flames normally. Please strictly follow the safety distance requirement, remove all human, animal or flammable objects in the danger area.</p>
Fueling		Please fueling with high quality fuel according to requirement of this manual
Power and DMX cable connection		
Switch ON the machine	 <p>Press the button on.</p>	Please confirm safety lock located at TEST MODE before switch on the POWER ON/OFF.
Set DMX address	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Set DMX Address</p> <p>1</p> </div>	
Compression	 <p>The blue LED shows the pressure is ready.</p>	Host controller: Press "pre-heat" button (both of the lights on)

<p>Check device status in TEST MODE</p>	 <p>The LED is off.</p>	<p>Reconfirm safety lock located at TEST MODE before test. In this status, the igniter will activated, but there is no flame.</p>
<p>Pressure Relief</p>		<p>Host controller: Press "pre-heat" key (both of the lights off)</p>
<p>Press the safety lock to USER MODE</p>	 <p>Press the button on, The LED is on.</p>	<p>Before switch to USER MODE, Please strictly follow the safety distance requirement, remove all human, animal or flammable objects in the danger area.</p>
<p>Compression</p>		<p>Host controller: Press "pre-heat" button (both of the lights on)</p>
<p>Firing</p>		<p>Host controller: Press "FIRING" key</p>
<p>Pressure Relief</p>		<p>Relief pressure when shows finished or uFlamer not use for a long period. Host controller: Press "pre-heat" key (both of the lights off)</p>
<p>Switch safety lock to TEST MODE</p>	 <p>Press the button off, The LED is off.</p>	<p>Guarantee safety use for next time</p>
<p>Power off</p>	 <p>Press the button off.</p>	<p>Power off uFlamer, tear down power cable and DMX cable, pack up the device when it is cooled down.</p>

4. DMX CONTROL (2CH-P, 2CH Professional Mode)

Channel	Function
CH-F	Ignition ON/OFF: (0~110) Ignition OFF, (111~255) Ignition ON. The default value F=1
CH-S	Mode setup: (0~49) Pressure Relief Mode (Emergency Stop), (50~200) Compression Mode, (201~255) Pressure Relief Mode (Emergency Stop). The default value S=2

Note: F = Fire Address ; S = Safety Address.

5. DMX CONTROL (6CH, 6CH Mode)

Channel	Function
CH-1	--none--
CH-2	--none--
CH-3	Ignition ON/OFF: (0~253) Ignition OFF, (254~255) Ignition ON
CH-4	Firing Duration setup: 0 and 255 is permanent fire (8s is limit duration time); 1~254 is 10~2540ms duration time (Manual firing duration = DMX Value * 10ms)
CH-5	--none--
CH-6	Mode setup: (0~49) Pressure Relief Mode (Emergency Stop), (50~200) Compression Mode, (201~255) Pressure Relief Mode (Emergency Stop)

6. DMX CONTROL (2CH-N , 2CH Normal Mode)

Channel	Function
CH-1	Ignition ON/OFF: (0~110) Ignition OFF, (111~255) Ignition ON
CH-2	Mode setup: (0~49) Pressure Relief Mode (Emergency Stop), (240~255) Compression Mode

▲ SHOWVEN host controller ZK6200/ZK6300

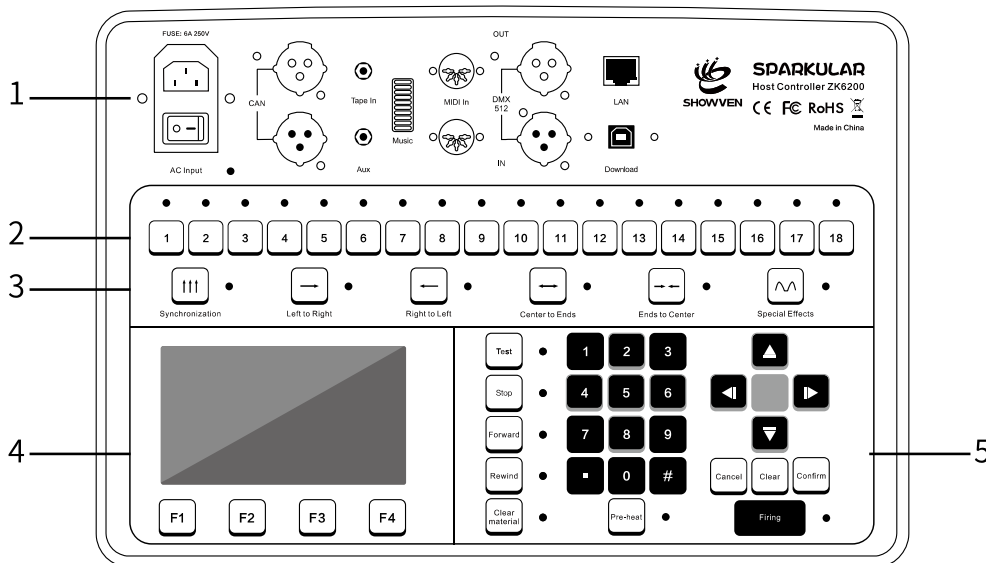
1. Hardware description:

- \ MODEL: X-F1800
- \ DIMENSION: 590×360×370mm
- \ WEIGHT: 30kg
- \ VOLTAGE: 100-240V, 50/60Hz
- \ POWER: 380W
- \ CONTROL: DMX
- \ INTERFACE: Neutrik®powerCON TRUE1 IN/OUT
Neutrik® 3-pin& 5-pin XLR IN/OUT
9V-60V Fireworks igniter signal port
- \ FLAME HEIGHT: up to 8-10m (no wind)
- \ ROTATE ANGLES: 210°(±105°)
- \ FUEL: ISOPAR-G, H, L, M; ISOPROPANEL, BIOETHANOL
- \ FUEL TANK CAPACITY: 10L
- \ FUEL CONSUMPTION RATE: 60ml/s
- \ EXT. BATTERY POWERED: YES

2. SHOWVEN host controller introduction:

1. Standard DMX512 signal output
2. Support 18units CIRCLE FLAMER (ZK6200) or 54units CIRCLE FLAMER (ZK6300) at the same time
3. 5 standard dynamic modes: Synchronization, Center to Ends, Ends to Center, Left to Right, Right to Left. And an user definable Special Effect mode, support 8 files, each file support 36000 lines maximum (effects lasts for 30min)
4. Multi trigger sources: manual, music or midi input
5. RDMX monitoring function: system can send back circle flamer working status info such as pressure, warming etc. and display on the screen
6. Emergency stop function

3. Operational Panel



(1) Cable Connection Area:

AC Input: AC Power Input

CAN: CAN communication input/output

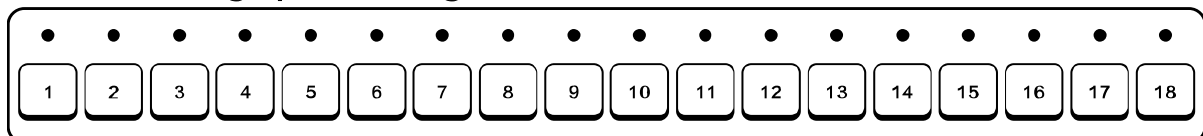
MIDI In: Midi time synchronous signal input

DMX 512: DMX signal input/output

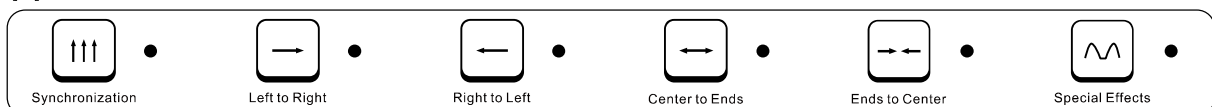
LAN: network interface

USB: program download interface, SparkularEdit200 software port

(2) Manual firing operation region:

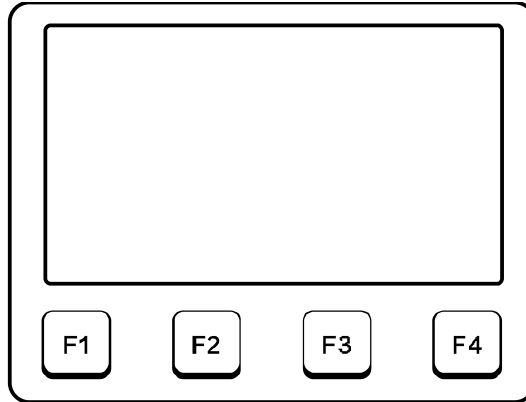


(3) Mode Selection Area:



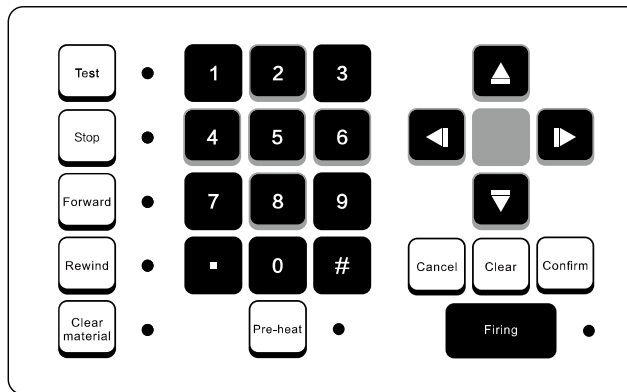
There are 5 standard dynamic mode and 1 special effects mode. Each mode support 8 files, it can be switched easily on the mode selection area

(4) LCD display Area:



- F1:** Main menu
- F2:** File selection
- F3:** Configuration
- F4:** About host controller

(5)Edit/Control Area:



Set circle flamer DMX address as below:

FLAMER No.	DMX address
1	1
2	7
3	13
4	19
5	25
6	31
7	37
8	43
9	49
10	55
11	61
12	67
13	73
14	79
15	85

16	91
17	97
18	103

Note: wrong DMX address setup may leads to flamer out of control.

Host controller ZK6200 setup as below:

1. Press "F3" enter host controller configuration menu, DEVICE choose "CIRCLE FLAMER" as below.
2. Set Start No. and End No. of device.

F3 CONFIG	
Start No.	: 1
End No.	: 10
Device	: CIRCLE FLAMER
Mode Selection	: User Mode
Repeat Time Mode	: Repeat Period Mode
DMX IN	: ON
DMX Address	: 1
CAN	: OFF
Trigger Source	: HAND
Audio Level	: 2
Audio Filter Delay	: 100ms

Press "F1" back to main interface.

F1 MAIN						
Synchronizarion CIRCLE FLAMER No. 1-10						
FILE NO.	FIRING HEIGHT	FIRING DURTN	TRIG DELAY	REPEAT DELAY	REPEAT COUNTS	
1	31	0.5s	0.0s	10.0s	1	
Terminal Monitor						
1	2	3	4	5	6	
7	8	9	10	11	12	
13	14	15	16	17	18	
From 1-15 Steppsequence short 2.4s						
MAIN		FILE	SELECT	CONFIG	ABOUT	

1. Set the FIRING DURTN, REPEAT PERIOD and REPEAT COUNTS values. (ignore SEQUENCE setting on uFlamer)
2. Press "Pre-heat" to activate the compression of device.
3. Press the "Firing" to make a show.

Note: Put safety lock at "TEST MODE" to check the signal connection and nozzle status before use the device for firing. For Emergency stop, press "PRE-HEAT", device will enter pressure relief mode, and stop emergently.

▲ Battery and Maintenance

1. Battery Recommendation



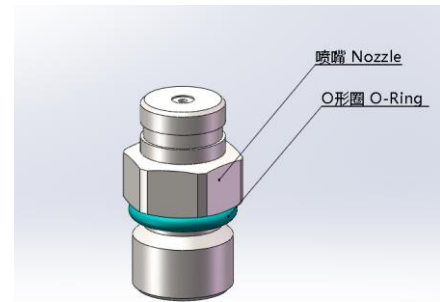
Standard	5200mah 35c-70c
Voltage	14.8V
Size	140*43*44mm
Charge Jack	2.54-5A
Discharge Jack	XT60
Installation	Contact our sales for the video

2. Maintenance

1. To maintain the system in good performance and running status, it is recommended to running the device at least once per month.

3. Maintenance of the nozzle: Nozzle need to be cleaned up , and it is recommended that once every six months (depending on the environment and frequency of use). In the process of using the equipment, if the flame shape is seriously deformed or the fuel injection line is significantly deformed or coarsened, the nozzle should be removed immediately for cleaning.

4. Maintenance of the O-ring: If it is found that the O-ring of the nozzle is damaged or ageing when cleaning the nozzle, the O-ring should be replaced in time (material and size of O-ring: fluororubber O-ring, the outermost diameter is 14 mm, and the line diameter is 2 mm).



Warranty Instructions

▲ Sincere thanks for your choosing CIRCLE FLAMER X-F1800, you will receive quality service from us.

▲ The product warranty period is one year. If there are any quality problems within 7 days after shipping out from our factory, we can exchange a brand new same model machine for you.

▲ 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 situations NOT included in warranty service:

1. Damage caused by improper transportation, usage, management, and maintenance, or damage caused by human factors;
2. Disassemble, modify or repair 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 applying for maintenance service from SHOWVEN.

Warranty Card

Product Name:		Serial No.	
Purchase Date:			
Tel:			
Address:			
Info. feedback about the problem:			
Actual problem:			
Maintenance detail:			
Service Engineer:		Service Date:	

SHOWVEN[®]



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