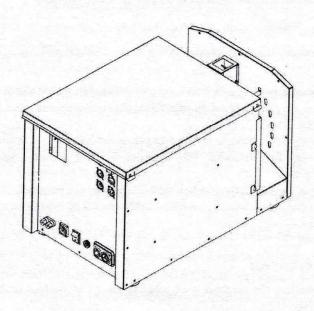
# LUX-FR2 HEAD MOVING FIRE MACHINE USER MANUAL



Thank you for choosing our products. In order to make our products more convenient and safe for customers, please read the instruction manual and observe the regulations of this manual before using this series of products,

# 1.Package content:

- ♦ Fire machine\*1
- ♦ User manual\*1
- ♦ 3m waterproof power cable\*1
- ♦ 3m waterproof signal cable\*1

After receiving the machine, please carefully unpack and check everything to ensure that all parts are complete and in good condition. If the outer packaging is damaged and any parts are damaged or missing due to transportation, please contact the dealer or carrier immediately and return it in the original packaging.

## 2.Product description:

This is a brand new design professional stage effect fire machine, easy to operate, fits for outdoor music festivals, it helps you to reach the highest climax with the fire breathing effects. And 210° jet angle is more flexible, and the distance of jet can up to 8-10 meters.

#### Disclaimer:

Our factory is not responsible for unsafe conditions, accidents and damage caused by the following reasons:

- Ignore the warnings or regulations shown in the machine or in the user manual.
- Professionals are not arranged to use the machine, and the machine is still used when it is broken
  or is damaged.
- For other purposes or environments other than those described in this manual.
- Changes to the fire machine. This includes the use of non-original spare parts, insufficient maintenance, etc.
- Before the machine was transported, the oil tank was not emptied.
- Accidents or damage caused by unauthorized removal or modification of the machine.
- Improper use.

# 3. Product features:

- Safety lock design: the machine can't work when the safety lock button is not pressed, to prevent accidental triggering.
- Tilt intelligent protection: the machine will automatically close the nozzle when it tilt 45° at any angle.
- Adopting high-speed and high-precision rotary drive device and control system to ensure the rapid and accurate setting of special effects.
- ♦ Both the power connector and the DMX connector are waterproof.
- Intelligent electronic control system, including pressure detection, safety prompt, oil-free detection, fault alarm and other functions.
- Equipped with igniter interface: support firework igniter signal interface.

- ♦ Support external power supply: support 24V battery power supply.
- Rainproof design: rainproof design for outdoor use, safer and more at ease.

# 4.Safety precautions:

This safety precaution contains important information about the installation, use and maintenance of the machine. Please read it carefully before using the machine. The damage caused by ignoring this item is not included in the scope of warranty. The manufacturer and dealer will not accept any responsibility for any defects or problems arising therefrom.

- Before turning on the power, please carefully check whether the power supply voltage matches
  the machine's rated voltage.
- ♦ Make sure that the power cord is not squeezed or damaged. If you find the machine casing or cable is damaged, do not operate this product. Please contact a technician immediately to replace the damaged part.
- Please use it with a grounded socket to avoid the risk of electric shock.
- ♦ Do not connect the machine to a dimming controller or varistor, even if it is only 0 and 100%.
- ♦ Do not disconnect the power supply by pulling the power cable.
- ♦ In order to eliminate unnecessary losses and increase the service life of the machine, please use a circuit breaker to disconnect when not in use, or unplug the power plug to completely cut off the connection between the machine and the power supply.
- ♦ This machine is for adult use only, please do not let children touch the machine.
- Please make sure that there are no flammable and explosive materials around the machine before connecting the power supply.
- Please connect the cable before turning on the power, and make sure that the command is in non-injection state and the machine is in test mode.
- Please pay attention to the use environment. The safety distance between people and flammable
  materials has been marked on the machine.
- ♦ After the machine is powered on,don't stay in the dangerous area of the fire machine. All relevant personnel must be informed of the safety distance, danger and function of it. The safety distance is: all fire angles are beyond 15m, and the distance between the front and rear sides is 5m.
- Do not install the machine on the surface of flammable and explosive materials (linoleum, carpet, wood, paper, carton, plastic, etc.). Do not put flammable and explosive liquids in oil drums, such as gasoline, perfume, alcohol, etc.
- If there is an accident that needs to be extinguished, please use a carbon dioxide fire extinguisher and prepare a fire blanket.
- Before transporting the machine, please empty the oil tank. Before cleaning the machine, disconnect the machine from the power source. When the machine has a serious failure, please stop using it immediately.

- ♦ This machine does not contain any parts that can be disassembled and repaired or modified by the user. Please do not attempt to repair it by yourself without trained and authorized personnel.
- Or modify the machine to avoid damage or malfunction.
- If there is any abnormal condition, please stop using it immediately, cut off the power supply, and check the fire oil, fuse, connection line and power plug at the same time. If it can not be solved, please contact the manufacturer.
- ♦ The operator should be able to directly see the status near the equipment, and when there is a danger, the performance can be terminated immediately. There should be a general AC power switch near the operator. When an abnormality occurs, the power supply of all equipment should be disconnected in time.
- Please use the original high-quality fire oil, otherwise it may malfunction or be dangerous, and don't add anything to the oil tank. Be very careful when adding fire oil. Keep the oil away from heat. sparks, flames and other possible sources of ignition.
- Precautions for using battery power: There is a stable circuit inside the machine, and the motor. speed will not change due to the decrease of battery power. Please use it when the voltage is greater than 24V. You can choose the 24V lead acid storage battery which it's capacity is greater than 20AH, standby can exceed 24 hours. If you use lithium batteries, you need to make sure the output current to be greater than 20A. And the connecting cable needs to be larger than 14AWG.In addition, the 3-PIN XLR connection way: L connects to 24V positive pole, N connects to 24V negative pole.

# 5. Important guidelines (common to all our equipment):

## 5.1. Environment Guide:

Important environmental information about this product in the environment section.

- The mark printed on the equipment or packaging means that the treatment after the end of the life of the machine will be harmful to the environment .
- Do not dispose of the machine (or battery) as unsorted municipal waste; it should be recycled by a professional company.
- Discarded equipment should be returned to your dealer or local recycling station.
- Comply with local environmental regulations; if you have any questions, please contact the local waste disposal bureau.
- ♦ Thank you for your purchase! If the machine is damaged during transportation, do not use it and contact your dealer in time.

# 5.2. Safety Guide:

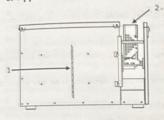
- Be very careful during installation :touching live wires can cause life-threatening electric shock.
- ♦ Keep this equipment away from rain and humidity.

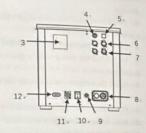
- Unplug the power cord before opening the case.
- This equipment should be installed and operated by qualified technicians.
- ♦ When the machine is changing temperature, do not turn on the switch immediately. Keep the switch in the off state until the machine reaches room temperature to protect the machine from damage.
- ♦ The grounding of the equipment is the basic element, and the circuit connection should be carried out by qualified personnel.
- ♦ Ensure that the available voltage does not exceed the voltage specified in this manual.
- ♦ Do not roll the power cord to prevent damage. If necessary, please replace it with an authorized dealer.
- ♦ When cleaning or not in use, do not connect to the power supply, and do not directly touch the power cord.
- ♦ Please note that the damage caused by the user's self-modification is not included in the warranty.
- ♦ Keep the equipment away from children and unauthorized users.
- ♦ Do not shake the device, and avoid strong force during installation or operation.
- ◆ Choose a place that can prevent the machine from generating extreme temperatures, dust and humidity.
- · Familiarize yourself with machine functions before actual use, and do not allow unqualified people to operate it. Any possible damage is likely to be caused by non-professional use of equipment.
- ◆ If the machine needs to be transported, please use the original packaging; for safety reasons, any modification of the machine is prohibited.
- ◆ Use this device only for its intended purpose. Any other use may cause short circuit, burnout. electric shock, chipping, etc., using the device in an unauthorized manner will not be covered by the
- This equipment is not suitable for long-term use. Frequent operation will shorten the service life. of your machine.

## 5.3. Installation guide:

- Do not stand directly under the machine when the machine is installed, moved or used.
- ♦ Have qualified personnel install the equipment in accordance with en60598-2-17 and any other electrical equipment specifications.
- ◆ The load structure must be able to withstand 10 times the weight of the machine for 1 hour without deformation.
- ♦ Have qualified technicians check the equipment annually and before each delivery for maintenance.
- ◆ The installation shall be carried out in the place without pedestrians, that is, the place inaccessible to unauthorized personnel.
- ♦ Make sure there are no combustibles within the 50 cm radius of the machine.

# 6. Appearance:





- 1. Tank level line
- 2. Nozzle
- 3. LCD control board
- 4. Safety lock
- Indicator light
   DMX 3-PIN XLR

- 7. DMX 5-PIN XLR
- 8. AC power supply
- 9. Overload protector
- 10. Power switch
- 10. Power switch
- 11. 24V battery power interface12. 2V-24V igniter signal interface

## 7. Specification:

Voltage:	AC220V/50HZ or AC110V/60HZ				
Power:	300w				
Fuse:	2A/4A				
Fire height:	8-10M (Under windless conditions )				
Head-moving Fire Angle:	0-210°				
On-device Manual Control	LCD display+Touch button				
Signal Interface:	Support 9V-60V Firework Igniter Signal Interface				
Fluid Tank Capacity	10L				
Fluid Consumption @ full volume	Approximate 0.6min/L				
rainproof Level:	IP13 (Rainproof design)				
Control Protocol:	DMX512				
DMX Channel:	6CH				
DMX In/Out Connectors:	3- pin and 5-pin XLR				
Consumables:	Specified Professional material for Fire machine(Isoparaffin)				
Net Weight	27kg				
Gross Weight	30kg				
Machine Dimensions(L*W*H)	675*375*368MM				

Packing Dimensions(L*W*H):	785*487*490MM	

## 8. Operation instructions:

#### 8.1. Preparation:

Please prepare according to the following steps before using the machine:

- Please make sure that there are no flammable materials around the machine and keep a safe distance between people and the equipment. The safety distance is: all fire angles are more than 15 meters, and around the machine are more than 5 meters.
- Place the machine flat on a dry and flat place, check that the appearance and spare parts of the
  machine are not damaged, and check that the power cord is intact and there is no broken skin or
  deformation.
- Please connect the DMX cable before turning on the power, and make sure that the communication command is in the non-injection state, and the device is in the test mode (safety lock up state).
- Plug the power cord into a grounded outlet. Before powering on, please reconfirm the voltage specifications.
- ◆ Turn on the power and power switch. At this time, the fire nozzle will automatically return to the center, and the indicator light is flashing at this time (the indicator light is flashing test mode, and the indicator light is off for the working mode).
- ◆ The operator should be able to directly see the situation near the machine, and when there is a danger, the performance can be stopped immediately. There should be a general AC power switch near the operator. When an abnormality occurs, the power

## 8.2.Display instructions:

BUTTON	FUNCTION
SET	Select menu page
A	Up
▼	Down
	Enter/Return



- Refer to "Menu Page" to learn about the menu options, including the display operation interface and the values available for selection.
- You can repeatedly press the <SET> to the page you want to set, until the parameter setting page appears.
- ♦ Press <▲> or <▼> to adjust the value of the current page parameter.
- ♦ Press <→> to return to the standby page.

# 8.3.Menu page instructions:

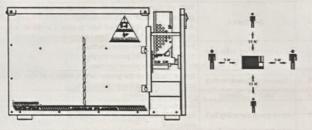
	Display	Description	Parameter
Standby Page	0. 0 1 24. 0	Turn on the power, the operation panel shows the standby page by default, and the states shows "Test", indicating that the safety lock is not pressed and it is in the safe mode. At this time, the indicator light is flashing, and the machine is in the test state.	Press<▲> or<▼> to adjust the DMX channels, range is 1-512
Parame ter Page	Permeter India Service III Ser	You can repeatedly press the <set> to the page you want to set, until the parameter setting page appears.  Press &lt;▲&gt; or &lt;▼&gt; to adjust the value of the current page parameter.</set>	MinAngle: 1-15 MaxAngle: 1-15 Manual: 1-108 Tip over: ON/OFF Middle: ON/OFF Invert: ON/OFF Language: Chinese/ English
Parame ter Page—T est functio	PRIVER TEST Pump oil Ignition Swing Edwart pressure	Press <▲> or <▼> to choose the function you want to test, press < →> to start the test function.	poli v
Work Page	0. 0 24. 0 State Boody	Press the safety lock button, the display panel enters the work page, and the states shows "Ready", indicating that the safety lock is currently pressed and in working mode. At this time, the indicator light is off, and it can fire at any time.	iqelQ.5.6 ecrnss
	State: E:P1	Pressurize for approximate 8S, the pressure value is less than 100%, the panel displays E:P1 Possible fault:  1. No fire oil in the tank; 2. The pump is broke; 3. Oil pipeline problem.	
Fault Page	State: E: Tip	When the machine tips over greater than 45 degrees, an alarm will be activated and the machine will stop working.	CONTRACTOR
	State: E: P2	Pressure relief failure, pipeline pressure cannot be drained. Possible fault:  1. Pressure relief valve problem; 2. Oil pipeline and control system problem	2273

State: E: 24V	The battery voltage is low and the machine stops working.	
State: E: 12V	The motor power is low, and the machine stops working.	

### Sign instruction:

Sign	Description
à	Indicates that the pump is pumping oil and pressurizing
1	Indicates that the machine is malfunctioning.
	Indicates that DMX512 signal is detected.

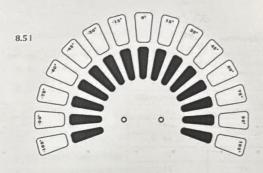
## 8.4. Operation instructions:



#### > NOTE:

- The safety distance of the fire machine is: all spray angle ranges are more than 15 meters, and the front and back sides are more than 5 meters. Please place the it in the direction of the above picture to correctly identify the direction of the mark.
- ♦ Open the top cover of the machine, take out the oil tank, and add the consumables.
- After the flame machine working finished, the nozzle temperature is still high, please do not touch it to prevent burns, and let it cool down naturally.
- After receiving the machine, remove the package and confirm the machine is complete.
   Considering that the use of fire machine is dangerous, please refer to the following operating procedures to operate one by one to ensure safety.

STEP	OPERRATION	DETAILS
1	Install the machine	The machine can only be installed horizontally on the ground on a strong support. If it is installed on a truss, please make sur that the machine is installed firmly and a safety rope lock installed.
2	Confirm that the safety lock is not pressed down	Confirm that the safety lock is not pressed down (status: test). It the test mode, the device can test the pumping, ignition swinging movement of the nozzle, and opening the pressur relief valve without fuel and fire. When the safety lock is presse (status: ready), the equipment can be used normally. At this time, the safety distance requirements of the flamethrower must be observed, and personnel and flammable materials must be cleared within the safety distance.
3	Add fire oil	Take out the oil tank and fill it with fire oil, and then carefull put the oil tank back into the machine to prevent it from spilling out, make sure that the oil tube is placed in the oil tank and tighten the lid of the tank. Please use professional fire oil.
4	Connect power cable and DMX cable	Provides two power access methods:  1. 110V/220V AC power supply  2. 24V battery power interface
5	Turn on the power switch	Before turning on the power switch, make sure that the safety lock is not pressed down (test mode).
6	Set DMX address	It occupies 6 channels
7	Press down the safety lock	According to the requirements of this manual, empty people and flammable materials within a safe distance. Press down the safety lock.
8	Pressure	Use DMX console: Set the channel5 value between 50-200.
9	Fire	Use DMX console: Set the channel6 value between 250-255.
10	Pressure relief	When the machine is used up or not used for a long time, release the pressure of the machine. Use DMX console: Set the channels value between 0-49 or 201-255.
11	Press the safety lock and confirm that the safety lock pops up	After using the machine, press the safety lock pops up to ensure that it is in a safe state next time you use it
12	Turn off the machine	Turn off the power switch, remove the power cable and signal line, pour out the remaining fire oil in the oil tank and empty it, and put the equipment away after the nozzle cools down.



# 8.6 DMX channel instructions:

Channel	Function					
Channel 1	Manual angle setting:(Value:0-255): The angle increases gradually from -105° to 105°. When the value of channel1 is 128, the nozzle is 0°					
Channel 2	Manual speed setting: (Value:0 and 255): maximum speed (Value:1-254) :speed increase					
Channel 3	Fire time setting: (Value:0 and 255): Keep firing (The longest fire duration is 10S); (Value:1-254): The fire duration is 10-2540ms (Manual-fire time=DMX value * 10ms)					
Channel 4	Sequence setting: (Value:0-1 and 250-255):No sequence (Value:2-217):Sequence selection. DMX value=Sequence number*2 (Value:218-249):Manual mode					
Channel 5	State setting: (Value:0-49 and 201-255):Pressure relief state (Quickly stop sequence) (Value:50-200): Pressurize state					
Channel 6	Fire setting: (Value:0-249):Fire off (Value:250-255):Fire on					

#### > Channel 1: Angle setting

The first channel is angel setting, which defines the angle at which the fire nozzle will point. This
angle can be selected anywhere -105° to 105° (DMX value 0 to 255)

♦ When the value of channel 1 is 128, the nozzle is 0°.

Angle number	Angle	DMX reference value
1	-105°	1
2	-90°	. 19
3	-75°	37
4	-60°	55
5	-45°	73
6	-30°	91
7	-15°	109
8	0°	128
9	15°	146
10	30°	164
11	45°	182
12	60°	200
13	75°	218
14	90°	236
15	105°	255

## > Channel 2: Speed setting

The second channel is nozzle speed setting, only used together with the first channel in the manual ignition.

DMX Value 0		1-254	255	
Speed	Max	Increase	Max	

## > Channel 3: Fire time setting

The third channel is fire time setting, manual fire time=DMX value \* 10ms (1s=1000ms)

DMX Value	0	1	2	11	3	 254	255

Fire time	Always	10ms	20ms	30ms	2540ms	Always

# > Channel 4: Sequence setting

- The fourth channel is used to select the fire sequence. Each channel in the sequence sheet is allowed to use 2 DMX values (please see the 8.7 sequence instructions).
- Only when the Channel 4 value is between 218~249, can the DMX console be used for manual control.
- ◆ DMX value=Sequence number\*2

DMX Value	0-1	2-3	4-5	6-7	8-9	216-217	218-249	250-255
Sequence number	NO	1	2	3	4	 108	Manual control opening conditions	NO

#### > Channel 5: State setting

- ♦ The fifth channel can set the state of the pump.
- When the safety lock is set to test mode(not press down), the machine will not be pressurized for safety. When the safety lock is set to work mode(press down), the DMX value must be set to 50-200 to start the pressurization, and then can fire normally.

DMX Value	0-49	50-200	201-255
State	Pressure relief	Pressurize	Pressure relief

## > Channel 6: Fire setting

- ♦ If the DMX value on this channel is higher than 250, it will fire.
- ♦ After firing, the value of channel 6 must be reset to 0 to re-spray.

DMX Value	0-249	250-255
State	Fire off	Fire on

## 8.7 Sequence instructions:

There are 108 kinds of fire sequences built in the machine, and the fire effect can be carried out through the specific channel DMX value or sequences number.

Please see the sheet below for details. ()

Sequences number	Fire angle	Details	Nozzle	Fire time (reference)	Channel4 DMX value (reference)
1	-105°	Single-shot short flame	Not shake	0.5s	2-3
2	-90°	Single-shot short flame	Not shake	0.5s	4-5
3	-75°	Single-shot short flame	Not shake	0.5s	6-7
4	-60°	Single-shot short flame	Not shake	0.5s	8-9
5	-45°	Single-shot short flame	Not shake	0.5s	10-11
6	-30°	Single-shot short flame	Not shake	0.5s	12-13

12

7	-15°	Single-shot short flame	Not shake	0.5s	14-15
8	0°	Single-shot short flame	Not shake	0.5s	16-17
9	15°	Single-shot short flame	Not shake	0.5s	18-19
10	30°	Single-shot short flame	Not shake	0.5s	20-21
11	45°	Single-shot short flame	Not shake	0.5s	22-23
12	60°	Single-shot short flame	Not shake	0.5s	24-25
13	75°	Single-shot short flame	Not shake	0.5s	26-27
14	90°	Single-shot short flame	Not shake	0.5s	28-29
15	105°	Single-shot short flame	Not shake	0.5s	30-31
16	-105°	Single-shot short flame	Not shake	1s	32-33
17	-90°	Single-shot short flame	Not shake	1s	34-35
18	-75°	Single-shot short flame	Not shake	1s	36-37
19	-60°	Single-shot short flame	Not shake	1s	38-39
20	-45°	Single-shot short flame	Not shake	1s	40-41
21	-30°	Single-shot short flame	Not shake	1s	42-43
22	-15°	Single-shot short flame	Not shake	1s	44-45
23	0°	Single-shot short flame	Not shake	1s	46-47
24	15°	Single-shot short flame	Not shake	1s	48-49
25	30°	Single-shot short flame	Not shake	1s	50-51
26	45°	Single-shot short flame	Not shake	1s	52-53
27	60°	Single-shot short flame	Not shake	1s	54-55
28	75°	Single-shot short flame	Not shake	1s	56-57
29	90°	Single-shot short flame	Not shake	1s	58-59
30	105°	Single-shot short flame	Not shake	1s	60-61
31	-105°	Single-shot long flame	Not shake	2s	62-63
32	-90°	Single-shot long flame	Not shake	2s	64-65
33	-75°	Single-shot long flame	Not shake	2s	66-67
34	-60°	Single-shot long flame	Not shake	25	68-69
35	-45°	Single-shot long flame	Not shake	2s	70-71
36	-30°	Single-shot long flame	Not shake	25	72-73
37	-15°	Single-shot long flame	Not shake	2s	74-75
38	0°	Single-shot long flame	Not shake	2s	76-77
39	15°	Single-shot long flame	Not shake	2s	78-79
40	30°	Single-shot long flame	Not shake	2s	80-81
41	45°	Single-shot long flame	Not shake	2s	82-83
42	60°	Single-shot long flame	Not shake	2s	84-85
43	75°	Single-shot long flame	Not shake	2s	86-87
44	90°	Single-shot long flame	Not shake	2s	88-89
-	105°	Single-shot long flame	Not shake	2s	90-91
45	0°	-	Not shake	8s	92-93
46		Single-shot long flame	L->R	3s	94-95
47	Stepping 1-15	Stepping short flame			
48	Stepping15-1	Stepping short flame	R->L	3s	96-97
49	Stepping 5>8>11	Stepping short flame	L->R	1.5s	98-99
50	Stepping	Stepping short flame	R->L	1.5s	100-101

51	Stepping 6>10	Stepping short flame	L->R	1.5s	102-103
52	Stepping 10>6	Stepping short flame	R->L	1.5s	104-105
53	Stepping 4>6>8>10>12	Stepping short flame	L->R	1s	106-107
54	Stepping 12>10>8>6>4	Stepping short flame	R->L	1s	108-109
55	Stepping 1-15	Stepping short flame	L->R	8s	110-111
56	Stepping 15-1	Stepping short flame	R->L	8s	112-113
57	Stepping 5>8>11	Stepping short flame	L->R	2s	114-115
58	Stepping 11>8>5	Stepping short flame	R->L	2s	116-117
59	Stepping 6>10	Stepping short flame	L->R	1.5s	118-119
60	Stepping 10<6	Stepping short flame	R->L	1.5s	120-121
61	Stepping 4>6>8>10>12	Stepping short flame	L->R	2.5s	122-123
62	Stepping 12>10>8>6>4	Stepping short flame	R->L	2.5s	124-125
63	Stepping 3>13	Stepping short flame	L->R	1s	126-127
64	Stepping 13>3	Stepping short flame	R->L	1s	128-129
65	Stepping 8>13	Stepping short flame	L->R	1s	130-131
66	Stepping 13>8	Stepping short flame	R->L	1s	132-133
67	Stepping 8>13	Stepping short flame	L->R	1s	134-135
68	Stepping 13>8	Stepping short flame	R->L	2s	136-137
69	Stepping 8>3	Stepping short flame	L->R	2s	138-139
70	Stepping 3>8	Stepping short flame	R->L	1s	140-141
71	Stepping 8>3	Stepping short flame	L->R	1s	142-143
72	Stepping 3>8	Stepping short flame	R->L	2s	144-145
73	Stepping 3>13	Stepping short flame	L->R	2s	146-147
74	Stepping 13>3	Stepping short flame	R->L	1s	148-149
75	Stepping 2>14	Stepping short flame	L->R	1s	150-151
76	Stepping 14>2	Stepping short flame	R->L	1.5s	152-153
77	Stepping 1>15	Stepping short flame	L->R	1s	154-155
78	Stepping 11>5	Stepping short flame	R->L	1s	156-157
79	Swinging 5>>11	Wide-angle sequence swinging flame	L->R	2.2s	158-159
80	Swinging 11>>5	Wide-angle sequence	R->L	3.2s	160-161

ALC: NO.		swinging flame			
81	Swinging 1>>15	Swinging flame	L->R	4.3s	162-163
82	Swinging 15>>1	Swinging flame	R->L	4.3s	164-165
83	Swinging 8>>15	Wide-angle sequence swinging flame	L->R	2.2s	166-167
84	Swinging 15>>8	Wide-angle sequence swinging flame	R->L	2.7s	168-169
85	Swinging 1>>8	Wide-angle sequence swinging flame	L->R	2.7s	170-171
86	Swinging 8>>1	Wide-angle sequence swinging flame	R->L	2.7s	172-173
87	Swinging 8>>11	Single-shot sequence swinging flame	L->R	1.1s	174-175
88	Swinging 11>>8	Single-shot sequence swinging flame	R->L	1.1s	176-177
89	Swinging 8>>5	Single-shot sequence swinging flame	L->R	1.1s	178-179
90	Swinging 5>>8	Single-shot sequence swinging flame	R->L	1.1s	180-181
91	Swinging 8>>13	Wide-angle sequence swinging flam	L->R	1.6s	182-183
92	Swinging 13>>8	Wide-angle sequence swinging flame	R->L	1.6s	184-185
93	Swinging 8>>3	Wide-angle sequence swinging flame	L->R	1.6s	186-187
94	Swinging 3>>8	Wide-angle sequence swinging flame	R->L	1.6s	188-189
95	Swinging 3>>13	Swinging flame	L->R	3.2s	190-191
96	Swinging 13>>3	Swinging flame	R->L	3.2s	192-193
97	Stepping 8>6>10>4>12	Upshot stepping flame	M>L>R>L>	2s	194-195
98	Stepping 8>10>6>12>4	Upshot stepping flame	M>L>R>L>	2s	196-197
99	Stepping 8>6>10>4>12	Upshot stepping flame	M>L>R>L>	2.5s	198-199
100	Stepping 8>10>6>12>4	Upshot stepping flame	M>L>R>L>	2.5s	200-201
101	Stepping 4>12>6>10>8	Upshot stepping flame	M>L>R>L>	2s	202-203
102	Stepping 12>4>10>6>8	Upshot stepping flame	M>L>R>L>	2s	204-205
103	Stepping 4>12>6>10>8	Upshot stepping flame	M>L>R>L>	2.5s	206-207
.04	Stepping	Upshot stepping flame	M>L>R>L>	2.5s	208-209

	12>4>10>6>8		R		
105	Stepping 8>5>11>6>10	Upshot stepping flame	M>L>R>L>	2.35	210-211
106	Stepping 8>11>5>10>6	Upshot stepping flame	M>L>R>L>	2.3s	212-213
107	Stepping 5>11>6>10>8	Upshot stepping flame	M>L>R>L>	2.3s	214-215
108	Stepping 11>5>10>6>8	Upshot stepping flame	M>L>R>L>	2.35	216-217

### NOTE:

- Fire angle: The number (1,2,3, ......, 15) refers to the angle number, please refer to the sheet in 8.6 DMX channel instructions, channel 1 for details.
- Nozzle: This refers to the nozzle angle when the machine is working. L is Left, R is Right, M is Middle.

## 8.8 DMX control example:

- > Set the fire nozzle upward:
- ♦ (Channel1 Angle= 128, Channel2 Speed= 0, Channel3 Time= 0, Channel4 Sequence= 218-249, Channel5 Pressurize=50-200, Channel6 Fire=0)
- ◆ Set Sequences NO.30: (Channel1 Angle= 128, Channel2 Speed= 0, Channel3 Time= 0, Channel4 Sequence=60, Channel5 Pressurize=50-200, Channel6 Fire=0)
- ◆ Set the sequence flame: (Channel1 Angle= 128, Channel2 Speed= 0, Channel3 Time= 0, Channel4 Sequence=60 , Channel5 Pressurize=50-200, Channel6 Fire=200-255)
- Note: After flaming, the channel 6 value must be reset to 0 to re-spray. Channel 1 determines the nozzle direction when it stops working.
- > DMX manual fire example 1:DMX manually swinging flame from the start to the end point.
- ◆ Set one angle as the starting point: ( Channel1 Angle=0. Channel2 Speed=0. Channel3 Time=0. Channel4 Sequence=218-249. Channel5 Pressurize=50-200. Channel6 Fire=0)
- Set the swinging speed: (Channel1 Angle= 0, Channel2 Speed= 50, Channel3 Time= 0, Channel4 Sequence= 218-249, Channel5 Pressurize=50-200, Channel6 Fire=0)
- ◆ Set one angle as the eanding point and fire:(Channel1 Angle= 255, Channel2 Speed= 50. Channel3 Time= 0, Channel4 Sequence= 218-249, Channel5 Pressurize=50-200, Channel6 Fire=200-255)
- ♦ Follow this operation, the nozzle will move from -105° to the 105° and flame.
- ♦ Note: After flaming, the channel 6 value must be reset to 0 to re-spray.
- > DMX manual fire example 2:DMX manual timing fire.
- ◆ Set the fire nozzle upward: (Channel1 Angle= 128. Channel2 Speed= 0, Channel3 Time= 0, Channel4 Sequence= 218-249. Channel5 Pressurize=50-200, Channel6 Fire=0)
- ◆ Set the fire time to 1s:( Channel1 Angle= 128, Channel2 Speed= 0. Channel3 Time= 100. Channel4 Sequence= 218-249, Channel5 Pressurize=50-200, Channel6 Fire=0)
- Fire:(Channel1 Angle= 128, Channel2 Speed= 0, Channel3 Time= 100, Channel4 Sequence= 218-249, Channel5 Pressurize=50-200, Channel6 Fire=200-255)
- ♦ Note: After flaming, the channel 6 value must be reset to 0 to re-spray.