



ICE FLOW

LOW-LYING FOG GENERATOR



User Instructions

Elation Lighting
4295 Charter Street
Los Angeles Ca. 90058
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Revised 7/03

Ice Flow™

Introduction

Unpacking: Thank you for purchasing the Ice Flow™ by Elation®. Every unit has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all equipment necessary to operate the unit has arrived intact. In the event damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

Introduction: This unit is designed to produce a ground fog effect to enhance dance floors, entry ways, and for halloween effects. Included with this unit is a timer remote control. Please read the following instructions and safety precautions before attempting any installation or using your new Ice Flow™.

Customer Support: Elation® provides a customer support line, to provide help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions. For service related issue please contact Elation®. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Pacific Standard Time.

Voice: (323) 582-3322
Fax: (323) 582-3311
E-mail: support@elationlighting.com

Warning! To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

Caution! There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact your nearest Elation dealer.

Please do not discard the shipping cartoon in the trash. Please recycle when ever possible.

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Ice Flow™

Warranty Registration

The Ice Flow™™ carries a one year (365 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain a R.A. number by contacting our customer support team on our toll free customer support number. All packages returned to the service department not displaying a R.A. number on the outside of the package will be returned to the shipper.

Ice Flow™

Safety Precautions

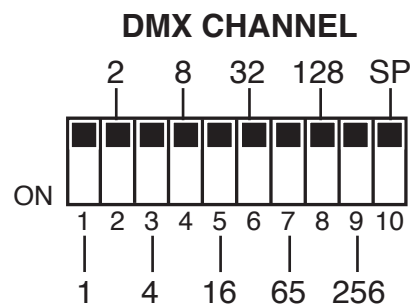
- Be sure to save the packing carton in the unlikely event the unit may have to be returned for service
- Do not spill liquids into or on to your fogger. Be sure that all the fog fluid is kept inside the fluid reservoir
- Be sure that the local power outlet match that or the required voltage for your fog machine
- Do not remove the top cover under any conditions. There are no user serviceable parts inside
- Disconnect the unit's main power when left unused for long periods of time
- Never connect this unit to a dimmer pack
- Do not attempt to operate this unit, if it becomes damaged in anyway
- Never operate this unit when it's cover is removed
- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture
- Do not attempt to operate this unit if the power cord has been frayed or broken. Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short
- Disconnect from main power before making any type of connection
- Never block the ventilation holes. Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall
- This unit is intended for indoor use only, use of this product outdoors voids all warranties
- Always mount this unit in a safe and stable matter
- Please route your power cord out of the way of foot traffic. Power cords should be routed so they are not likely to be walked on, pinched by items placed upon or against them
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See page 9 for cleaning details
- The unit should only be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the unit.
 - C. The unit has been exposed to rain or water.
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance.

DMX-512: DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA “IN” and DATA “OUT” XLR terminals located on all DMX fixtures (most controllers only have a DATA “OUT” terminal).

DMX Linking: DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

Dip-switches in DMX mode: This unit uses dip switches to assign a DMX address. Each dip switch represents a binary value.

Dip Switch 1 address equals 1
Dip Switch 2 address equals 2
Dip Switch 3 address equals 4
Dip Switch 4 address equals 8
Dip Switch 5 address equals 16
Dip Switch 6 address equals 32
Dip Switch 7 address equals 64
Dip Switch 8 address equals 128
Dip Switch 9 address equals 256



Each dip switch has a preset value. A specific DMX address is set by combining the dip switches that sum your desired value. For example: To achieve a DMX address of 21, combine dip switches 1, 3, and 5. Sense dip switch 1 has a value of 1, dip switch 3 has a value of 4, and dip switch 5 has a value of 16, the combination of the create a DMX value of 21.

Set DMX address 21:

Dip-switches # 1 = 1

 $3 = 4$
$$5 = 16$$

= 21

Set DMX address 201:

Dip-switches # 1 = 1

 $4 = 8$
$$7 = 64$$
$$8 = 128$$

= 201

Data Cable (DMX Cable) Requirements (For DMX and Master/Slave Operation): The Ice Flow™ can be controlled via DMX-512

Slave Operation): The Ice Flow™ can be controlled via DMX-512 protocol. The Elation Professional® Ice Flow™ is a one channel DMX unit. The DMX address is set on the rear panel of the Ice Flow™. Your unit and your DMX controller require a standard 3-pin XLR connector for data input and data output (Figure 1). If you are making your own cables, be sure to use standard two conductor shielded cable (This cable may be purchased at almost all pro sound and lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and can not be split.


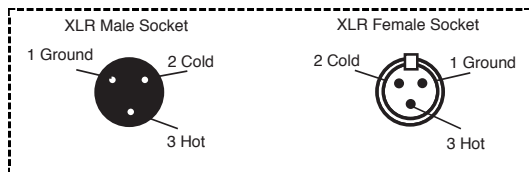


Figure 1



Figure 1

Notice: Be sure to follow figures two and three when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behavior.



XLR Pin Configuration

- Pin 1 = Ground
 Pin 2 = Data Compliment (negative)
 Pin 3 = Data True (positive)

Figure 2



Figure 3

Special Note: Line Termination.

When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 90-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator will decrease the possibilities of erratic behavior.

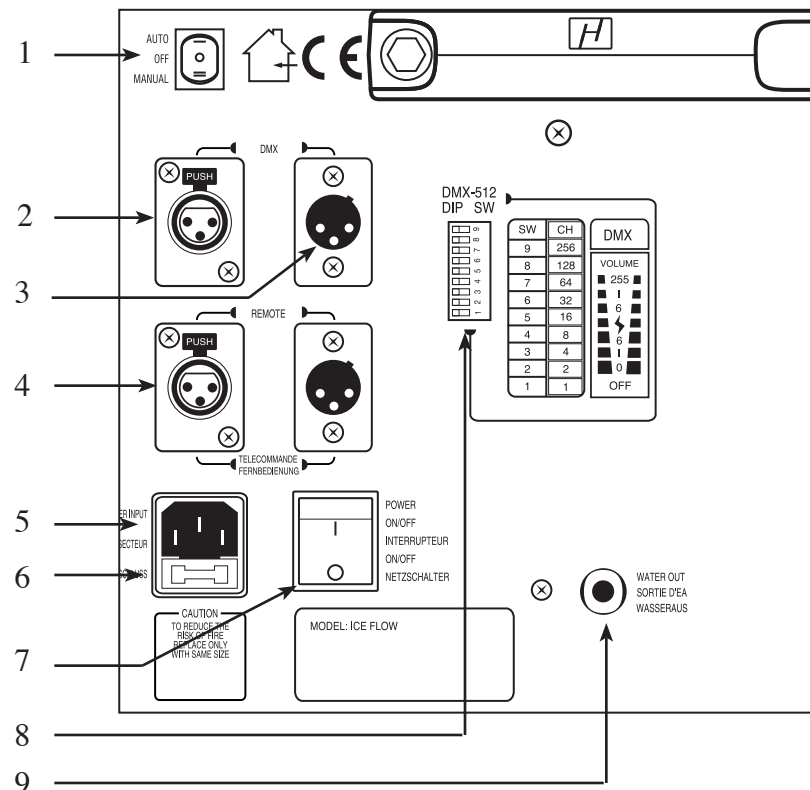


Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

Figure 4

5-Pin XLR DMX Connectors. Some manufactures use 5-pin XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used, these adaptors are readily available at most electric stores. The chart below details a proper cable conversion.

3-Pin XLR to 5-Pin XLR Conversion		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Shield	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Pin 4 - Do Not Use
Not Used		Pin 5 - Do Not Use



- 1. Drain Switch** - Selects the mode in which the water is drained out of the unit, either automatic or manual. See page 12 for details.
- 2. XLR Input Jack** - This jack is used to accept an incoming DMX signal.
- 3. XLR Output Jack** - This jack is used to transmit the incoming DMX signal to another DMX fixture, or transmit a Master/Slave signal to the next unit in the chain. For best results in DMX or Master/Slave mode terminate this jack if it is the last unit in the chain.

4. **Timer Remote Input** - Used to connect the timer remote control. See page 11 for timer remote instructions.
5. **AC Cord** - Connect only to a matching power outlet. Never use this fixture if the ground prong has been removed or broken off.
6. **Fuse Holder** - This housing stores the 2 amp GMA protective fuse. Always replace with the exact same type fuse, unless otherwise instructed, by an authorized American DJ® service technician.
7. **Power Switch** - The main on/off switch.
8. **Dipswitches** - In DMX mode these switches are used to assign a DMX address to the unit. In DMX mode each switch corresponds to a specific value based on binary code. See page 5 for a detailed explanation of DMX binary code.
9. **Drain Hole** - The water that results from the ice melting is drained out of the unit through this hole. The supplied water tube is connected to this hole.

1. Open the shipping carton and carefully remove the unit from the shipping carton.
2. Be sure to remove all the packing material especially around the nozzle.
3. Set the machine on a flat dry surface and unscrew the knob on the top of the unit. Open the top of the unit, and fill the inside of the Ice Flow™ with ice.
4. Remove the reservoir cap located on the top of the machine.
5. Fill the Ice Flow™ reservoir with Elation brand fog juice only and replace the cap.
6. Insert the water tube into the water bag. When the ice melts, the water will empty into the bag (see Drain Switch below).
7. Remove the remote control from the carton. Firmly attach the remote control to the remote control socket located on the rear unit.

8. Plug the unit in to a matching power supply and flip the power switch to the on position.
9. Allow the unit to heat up. When the unit is ready to fog, the green LED on the remote will light up, indicating the unit is ready.

Always be sure to maintain an adequate supply of Elation® Brand Fog juice™ in the fluid reservoir. Running the fog machine dry will cause pump failure and or clogging. This is the largest cause of failure in fog machines.

This unit has a 10 minute warm up time. After the unit is warmed up follow the directions below for ground fogger operation.

Place your fog machine in a well ventilated area. Be sure your ground fogger is placed on a flat, level surface. Always maintain an adequate supply of Elation Fog Juice™ in the fluid reservoir. Running the fog machine dry will cause pump failure and or clogging. Running a fog machine dry is the largest cause of fog machine failure. Only Elation Fog Juice™ is recommended and not all fog juice is created equal. Plug your fog machine into a standard 110V/120V supply. Once the machine is plugged in and turned on, the power switch will begin to glow indicating the unit is receiving power.

Universal DMX Control: This function allows you to use a universal DMX-512 controller such as the Elation® DMX Operator™ or Show Designer to control fog output.

1. The Ice Flow™ uses one DMX channel. Channel value 0 to 64 will not produce fog output, channel value 65 to 255 the Ice Flow™ will produce fog.
3. To control your fixture in DMX mode, follow the set-up procedures on pages 5 - 6 as well as the set-up specifications that are included with your DMX controller.
4. Use the controller's faders to control the DMX fixture trait.
5. For longer cable runs (more than a 100 feet) use a terminator on the last fixture.
6. For help operating in DMX mode consult the manual included with your DMX controller.

Duration:

1. This function allows you to set how long the fog burst will last, when in timer mode.
2. You can adjust the length of the fog burst from one second to 200 seconds.
3. To set the duration, turn the duration knob in a clockwise/counter-clockwise direction. Turning the knob clockwise will increase the duration, turning the knob counter-clockwise will decrease the duration.

Interval:

1. In timer mode, this function allows you to set the time interval between fog bursts.
2. Fog burst interval can be set from one second to 200 seconds.
3. To set the interval turn the interval knob in a clockwise/counter-clockwise direction. Turning the knob clockwise will increase the interval, turning the knob counter-clockwise will decrease the interval.

Timer On/Off:

1. This Function allows you to set the fogger on an automatic setting. You can set the Interval, Duration, and as described at the top of the page.
2. This button allows you turn the timer function on and off. A glowing yellow LED will indicate this function is activated.

Continuous:

When this button is pushed the fogger will run continuously without stopping until the button is pushed again or the tank runs out of fog fluid.

Manual:

When this button is pressed it will emit fog as long as the button is held down.

The drain switch on the back is for emptying the water produced by the melted ice, out of the unit. There are two modes of draining the water, automatically and manually.

Auto (I) - A sensor inside the unit will activate the pump when a certain water level is reached. The pump will empty the water out of the unit.

Manual (II) - When the manual mode of draining is selected, the pump will turn on instantly and pump whatever water is in the unit, out of the unit.

To help prevent the unit from clogging, use Elation® Clean Machine™ liquid. Clean Machine is recommended when storing your fogger for more than 1 week, or at least once a month as normal maintenance under regular usage. Clean Machine removes particle build up in the heater and gives longer life to the fog machine. Clean Machine is like a tune up for your fog machine! Clean Machine is available in gallon or quart bottles.

If you experience low fog output, pump noise, or no fog output at all, disconnect and discontinue use immediately. Do not continue pushing the remote control's activation button as this may damage the Ice Flow™. Check fluid level, the external fuse or breaker, remote connection, and be sure the wall outlet is sending power. If all of the above appear to be okay, and the unit fails to operate correctly, the unit may require service. Please contact customer support for further instructions. Please do not return the unit to your dealer without contacting customer support first.

1 YEAR LIMITED WARRANTY

A. Elation® hereby warrants, to the original purchaser, Elation® products to be free of manufacturing defects in material and workmanship for a period of one year (365 days) from the date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Elation® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation® will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation® shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which Elation® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation® factory unless prior written authorization was issued to purchaser by Elation®; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, Elation® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation®. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.

E. Elation® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation® be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

G. This warranty is the only written warranty applicable to Elation® Products and supercedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

H. Lamps are not covered under this warranty.

MODEL -	Ice Flow™
WEIGHT:	49 Lbs./ 24.5 Kgs.
DIMENSIONS:	23.8" (L) x 12.4" (W) x 14.1" (H)
FUSE:	10A 125V/ 5A 250V
SUPPLY VOLTAGE:	120V
WARM UP TIME:	10 Minutes
HEATER:	1000 Watts
TANK CAPACITY:	0.5 Liter Removable Tank
OUTPUT:	10,000 cubic feet per minute
FLUID TYPE:	Water Base Elation Fog juice™
DUTY CYCLE:	Not to exceed 6 hours plugged in.

**Voltage is preset at the factory and may not be changed*

Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.



©Elation Supply®

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