# Technical Specifications:

Model: Waterfall™

Lamp: SC150 120v/150w HTI

Voltage: 110~120v

Dimensions: 10"H x 12"W x 15"L

Colors 6 plus White

Weight: 24 Lbs Fuse: 5 Amp





**User Instructions** 

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## Waterfall™ Unpacking

Every Waterfall™ 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 system has arrived intact. In the case damage has been found or parts are missing, please contact our toll free customer support number for further instructions.

#### Waterfall™ Introduction

**Introduction:** Thank you for purchasing the Elation<sub>®</sub> Waterfall.<sup>™</sup> To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. The Waterfall<sup>™</sup> is an effect that simulates moving water and fire. The Waterfall<sup>™</sup> was created to meet the demands of theatrical groups and for individuals that desire an incredible effect without strong flashing lights or fog.

**Customer Support:** Elation⊚ provides a toll free customer support line, to provide set up 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. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Pacific Standard Time.

Voice: (800) 322-6337 Fax: (323) 582-2610

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.

#### DISCHARGE LAMP WARNING!

This fixture is fitted with a discharge lamp which is highly susceptible to damage if improperly handled. Never touch lamp with your bare fingers as the oil from your hands will shorten lamp life. Also, never move the fixture until the lamp has had ample time to cool. Remember, lamps are not covered under warranty conditions.

#### Waterfall™ Lamp Replacement

Caution! Never open the unit when in use. Always disconnect the main power before attempting to replace the lamp. Remember always replace with the same type lamp and fuse.

- 1. Be sure to follow the proper procedures when handling discharge lamp.
- 2. Remove the thumb screw on the trap door located at the rear of the unit.
- 3. Pull down the trap door to expose the socket assembly.
- 4. Remove and replace the lamp.
- 5. Reassemble.

#### Waterfall™ Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses must be carried out periodically to optimize light output.

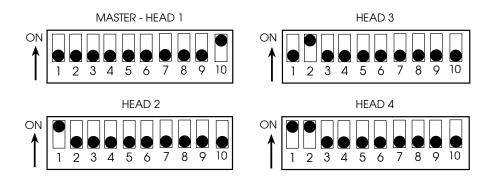
- 1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
- 2. Use a brush to wipe down the fan grill and remove as much built up as possible.
- 3. Clean the external optics with glass cleaner and a soft cloth every 20 days.
- 4. Clean the internal optics with glass cleaner and a soft cloth every 30-60 days.
- 5. Always be sure to dry all parts completely before plugging the unit in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

## Waterfall™ Warranty Card

The Waterfall™ carries a two year limited warranty. We recommend you 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 R.A. Number. If the unit is under warranty, you must provide a proof of purchase invoice.

#### Waterfall™ Dip Switch Settings



#### Waterfall™ DMX Traits

The Waterfall™ uses one DMX channel. The chart to the right details the DMX traits. The color scroll option will increase in speed as the DMX value progresses from 144 to 255.

135-143	Half Pink
126-134	Pink
117-125	Orng/Pink
108-116	Orange
99-107	Yell/Orng
90-98	Yellow
81-89	Grn/Yellow
72-80	Green
63-71	Blue/Grn
54-62	Blue
45-53	Red/Blue
36-44	Red
27-35	White/Red
79-5P	White
09-17	1/2 White
00-08	Blackout

144-255 Color Scroll

### Waterfall™ Set Up

**Power Supply:** Before plugging your unit in be sure the source voltage in your area matches the required voltage for your Elation<sub>®</sub> Waterfall.™ The Elation<sub>®</sub> Waterfall™ is available in a 115v and 230v version. Line voltage may vary from venue to venue. Be sure to plug your unit into a matching wall outlet before attempting to operate.

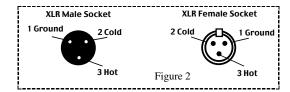
Data Cable (DMX Cable) Requirements (For DMX Operation Only and Master-Slave): The Waterfall can be controlled via DMX-512 protocol. The Elation<sub>®</sub> Waterfall™ is a single channel DMX unit. The DMX address is set on the rear panel of the Waterfall. Your unit



Figure 1

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.

**Notice:** Be sure to follow figure 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 = Shield	
Pin 2 = Data Compliment (negative)	
Pin 3 = Data True (positive)	

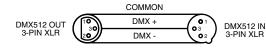


Figure 3

#### Waterfall™ Set Up

**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

**Linking:** Your unit comes with built in programs. These programs will automatically run to the beat of music. For a more dramatic effect, link several units together. Each unit can act a "Master Unit" that can control up to 3 more units. Link the units together using standard DMX cable. Follow the Master/Slave Dip Switch Chart on page 6 for proper dip switch settings. The built programs are optimized for a four unit chase.

#### Waterfall™ DMX Addressing

DMX stands for Digital Multiplex. This is a universal binary language used as a form of communication between intelligent fixtures. 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

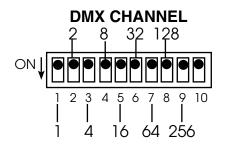
Dip Switch 5 address equals 16

Dip Switch 6 address equals 32

Dip Switch 7 address equals 64

Dip Switch 8 address equals 128

Dip Switch 9 address equals 256



Dip Switch 10 is used to control the Master/Slave operation. Turning dip switch 10 on will activate that unit as a "Master Unit."

## Waterfall™ Operation

**Stand Alone:** This function is used when using only one unit or running more than one unit as individual fixtures.

- A. Set dip switch 10 to the on position (see page 6).
- B. Plug the unit in, the unit will react to sound via an internal microphone.
- C. Use the audio sensitivity knob on the rear of the unit to make the unit more or less sensitive to sound. Turning the knob in a clockwise direction will make the unit more sensitive to sound.

**Master / Slave Operation:** This function will allow you to link up to 4 units together. In this mode, the units will react to sound via the master units internal microphone. The units will also run to the built in programs.

- A. Use XLR cables to daisy chain the fixtures together. Remembering the female XLR is the output, and the male XLR is the input.
- B. Be sure to follow the dip switch chart on the top of page 6.
- C. For longer cable runs, we suggest a terminator at the last fixture in the cable run (see terminator on page 4).

Universal DMX Control: This function allows you to use a universal DMX controller such as the Elation® Show Designer.™ The use of a DMX controller will allow you to customize the use of fixtures allowing you independent control of the color wheel and the ability to black out. This will allow you to create your own programs or use your fixtures as textured color changers.

- A. The Waterfall™ is a one channel DMX fixture.
- B. When using a DMX controller and setting up for DMX operation follow the standard DMX Binary Code for a one (1) channel unit.
- C. For help running in DMX mode consult the manual that comes with your DMX controller.
- D. For longer cable runs, we suggest a terminator at the last fixture in the cable run (see terminator on page 4).