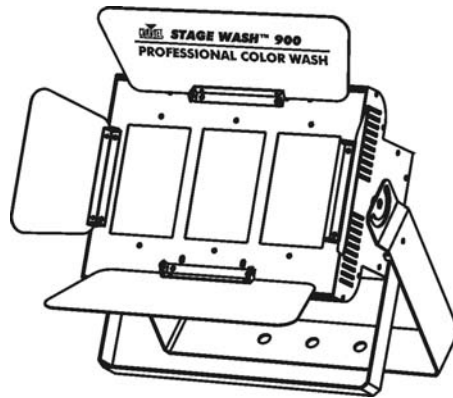


# TFX-900 Stage Wash™ 900

## USER MANUAL



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# BEFORE YOU BEGIN

## What is included

- 1 x Stage Wash™ 900 (TFX-900)
- Power cord with plug
- 3 x EHM 300w 120v or 3 x EHM2 300w 230v lamps
- Warranty Card & Manual

## Unpacking Instructions

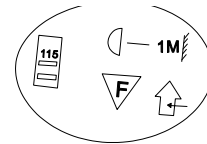
Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

## AC Power

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart. A fixture's listed current rating is its average current draw under normal conditions. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch. Before applying power to a fixture, check that the source voltage matches the fixture's requirement.

Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

Figure 1 - AC Voltage Switch



### Warning!

**Verify that the power select switch on your unit matches the line voltage applied. All fixtures must be connected to circuits with a suitable Earth Ground.**

## Safety Instructions



Please read these instructions carefully, which includes important information about the installation, usage and maintenance?



- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage and that the line voltage you are connecting to is not higher than that stated on decal or rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect from power source before servicing or replacing lamp or fuse and be sure to replace with same lamp source.
- Secure fixture to fastening device using a safety chain. Never carry the fixture solely by its head. Use its carrying handles.
- Maximum ambient temperature is Ta: 40°. Do not operate fixture at temperatures higher than this.
- In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Don't connect the device to a dimmer pack.
- Make sure power cord is never crimped or damaged.
- Never disconnect power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to lamp while it is on.

### Caution!

**There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact CHAUVET.**

# INTRODUCTION

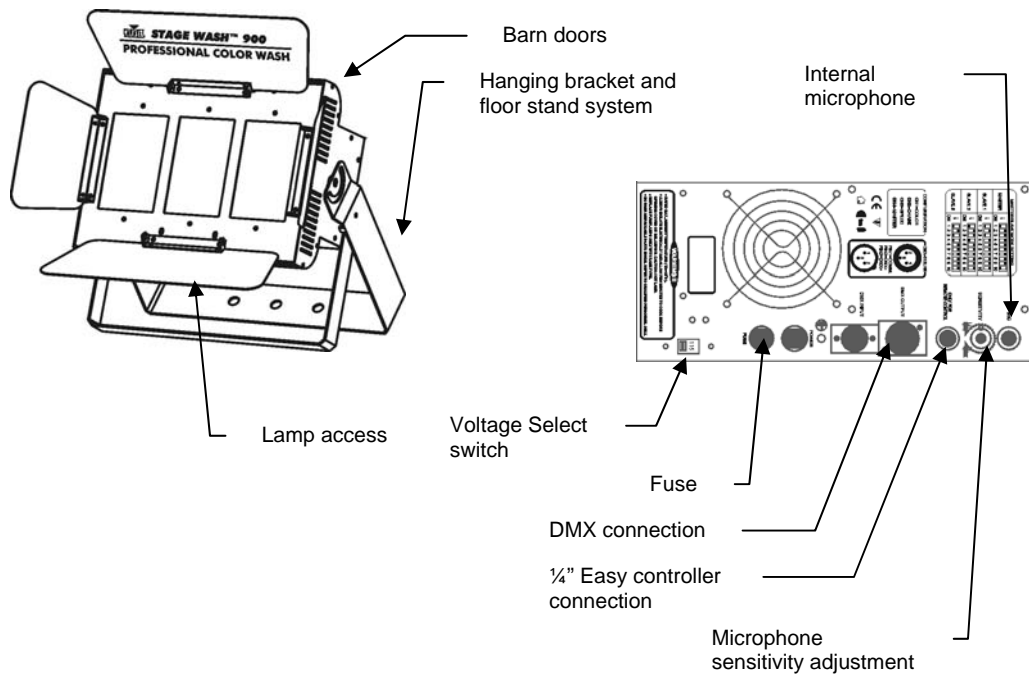
## Features

- professional grade color wash using red, green and blue heat resistant dichroic filters
- 32 pre-set colors and various chase patterns
- barn doors
- 900 watts of explosive brightness
- multi-purpose yoke/floor stand system
- switch-selectable power settings 115v or 230v, (240v available)
- DMX-512 Control
- Master/Slave operation

## DMX Channel Summary

Channel	Function
1	Color
2	Chase
3	Speed
4	Dimmer

## Product Overview



Product Overview

# SETUP

## Lamp

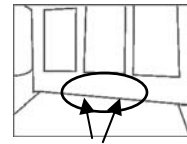
You will need to install a lamp prior to the initial operation of the fixture. Three EHM 300W halogen lamps are included.

**Warning!** *When replacing the lamp, please wait 15 minutes after powering down to allow the unit to cool down! Always disconnect from main power prior to lamp replacement.* Do not touch the envelope (glass area) of the bulb with bare hands. If this happens, clean the lamp with alcohol and wipe it with a lint free cloth before installation.

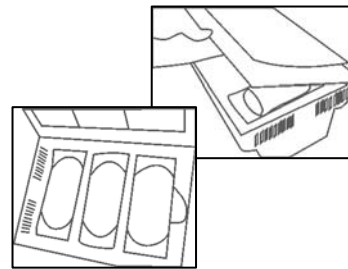
### LAMP INSTALLATION

- 1) Remove the 2 screws as illustrated in Figure 3, located on the front of the fixture and lift the entire cover plate until lamp reflectors are exposed.
- 2) The linear lamp is held in place by tension provided by springs inside of both ceramic socket ends. It is important to proceed with lamp removal and replacement very delicately.
- 3) Hold linear lamp with a napkin and push in the direction of either of the two ends to relieve tension on the opposite end. Then pull end of lamp upwards to remove from socket.
- 4) To replace lamp, follow the same procedure as above to insert lamp into the socket.
- 5) Lower the cover plate and replace both screws.
- 6) No lamp alignment is necessary for this fixture.

TFX-900 Lamp Installation



Remove these 2 screws



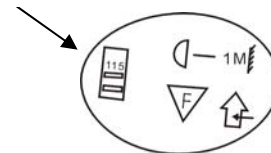
Lamps exposed

## Power

Your product is equipped with switch-selectable AC power setting.

**Warning!** *Verify that the power select switch on your unit matches the line voltage applied. All fixtures must be connected to circuits with a suitable Earth Ground.*

Slide switch up or down depending on your line voltage.



- To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart.
- A fixture's listed current rating is its average current draw under normal conditions.
- All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.
- Before applying power to a fixture, check that the source voltage matches the fixture's requirement.
- All fixtures must be connected to circuits with a suitable Earth Ground.

## Mounting

### ORIENTATION

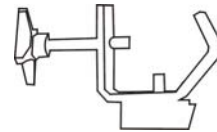
This fixture may be mounted in any position provided there is adequate room for ventilation.

### RIGGING

It is important never to obstruct the fan or vents pathway. Mount the fixture using a suitable "C" or "O" type clamp. Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

- When selecting installation location, take into consideration lamp replacement access and routine maintenance.
- Safety cables should always be used.
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

**Hanging Clamp**



Note!  
Clamp is sold separately.

# OPERATING INSTRUCTIONS

## Operating Modes

The TFX-900 can be operated in three ways.

- A stand-alone mode will listen to sound and run through its diverse range of built in programs. An optional CA-8 and CA-8F wired controller provides simple remote control.
- Master/Slave mode will allow the command of up to as many units you want in a synchronized light show to the sound.
- DMX control mode will provide the greatest flexibility and creativity. Each fixture trait can be controlled individually using any universal DMX-512 controller.

### Stand Alone

The Stand Alone mode is activated automatically when the fixture is absent of DMX signal or a controller is not connected. The TFX-900 will run through its built in programs as it listens to the sound.

### Master/Slave

The Master/Slave mode will allow you to link up to as many units you want in a daisy chain fashion. In this mode, the first unit in the daisy chain will automatically command all other units following. The programs are constructed based on the control of four units. An optional CA-8 or CA-8F controller connected to the first unit in the chain will allow enhanced control functions.

## MASTER/SLAVE SETTINGS

- 1) Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the first fixture.
- 2) Connect the end of the cable coming from the first fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on as illustrated below in figure "Daisy Chain Connection".
- 3) On the first unit in the chain set dipswitch number 1 and 10 to the ON position as shown in Figure "Dipswitch 1 & 10 ON".

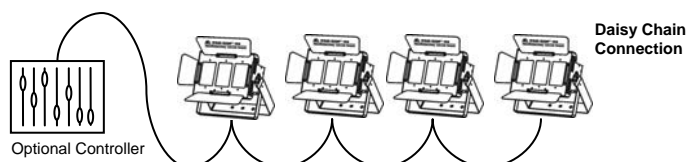
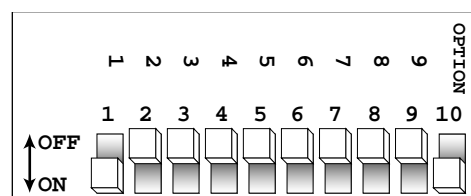


Figure: Dipswitch 1 & 10 ON

**Note!**

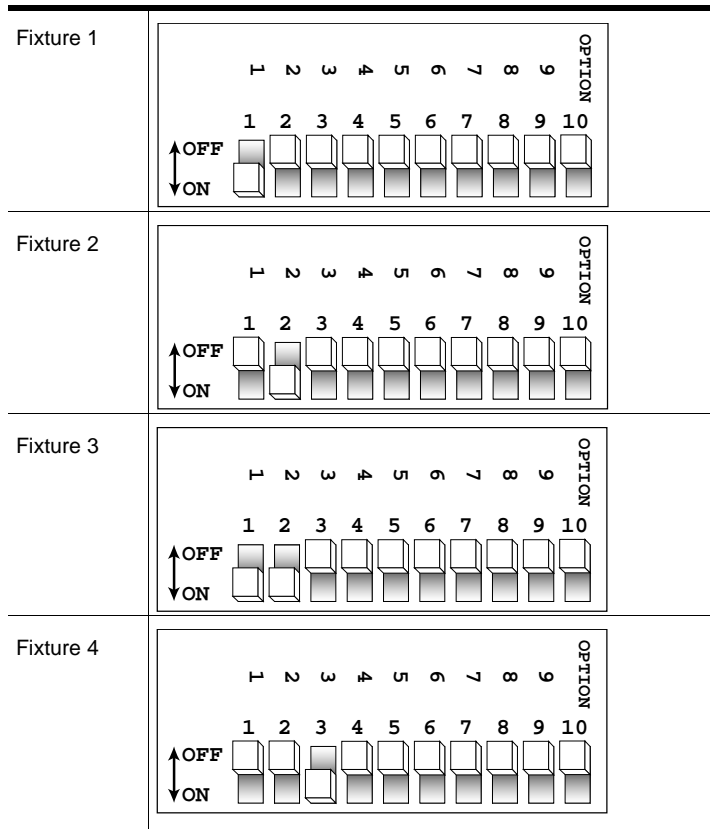
**For additional information on linking fixtures read under section "DMX Primer"**



## SHOW CUSTOMIZATION

You can manually assign a slave device number to the fixtures by adjusting the dip-switches as illustrated below. This provides a way for you to customize the playback such as creating unison movement across selections or counter movements.

### MANUAL SLAVE SETTINGS



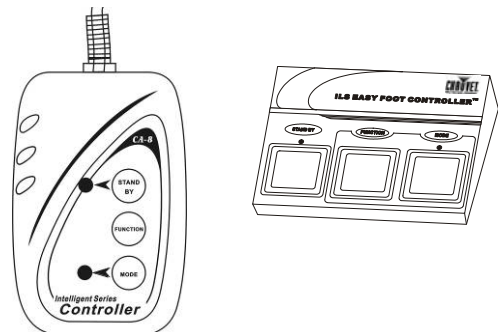
## CA-8 & CA-8F Easy Controller (Optional)

The CA-8 and CA-8F Easy Controller is used only in master/slave mode. Connect the controller to the 1/4" microphone jack in the first unit. The table below describes the different preset shows the CA-8 Controller can command.

### CA-8 BUTTONS

Stand By	Mode	Function
	Sound	1. Sync strobe 2. 2-light show strobe
Blackout	Manual	Full On/Color select
	Latch	Full On/Color select

CA-8 Easy Controller & the CA-8F Foot Controller

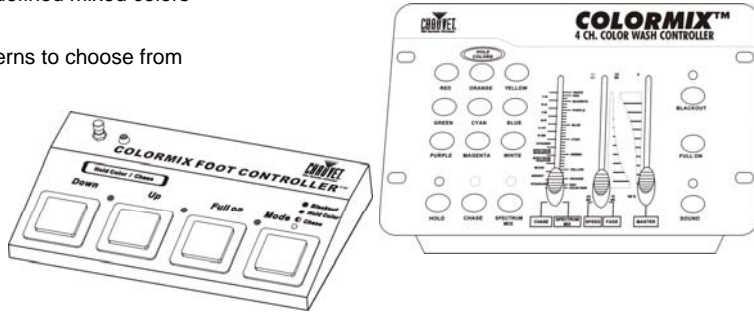




### CA-32 Colormix Controller (Optional)

The CA-32 is an enhanced dedicated controller for the TFX-900 fixture. A foot controller is also available for hands-free operation. The CA-32 provides the following features.

- 9 different hold-color buttons for immediate color access
- fader access to 32 predefined mixed colors
- fade time control
- 12 different chase patterns to choose from
- chase speed control
- master dimmer level
- blackout button
- full on button
- sound button



Please refer to the CA-32 and CA-32F user manuals for more in depth information.

### DMX Mode

Operating in a DMX Control mode environment gives the user the greatest flexibility when it comes to customizing or creating a show. You can tailor your programming to suit a specific event. Whether it is a wedding where a spot light may be required or a lead singer requiring a color solo, the opportunities are end less. In this mode you will be able to control each individual trait of the fixture independently.

### SETTING THE STARTING ADDRESS

This DMX mode enables the use of a universal DMX controller device. Each fixture requires a "start address" from 1 to 511. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that occupies or uses 6 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, and 105. Choose start addresses so that the channels used do not overlap and notate the start address selected for future reference.

If this is your first time addressing a fixture using the DMX-512 control protocol than I suggest jumping to the Appendix Section and read the heading "DMX Primer". It contains very useful information that will help you understand its use.

Set the start address using the group of DIP switches located usually on bottom of the fixture. Each dip switch has an associated value. Adding the value of each switch in the ON position will provide the start address. Determining which switches to toggle ON given a specific start address can be accomplished in the following manner. By subtracting the largest switch value possible from the selected start address which does not cause a negative number.

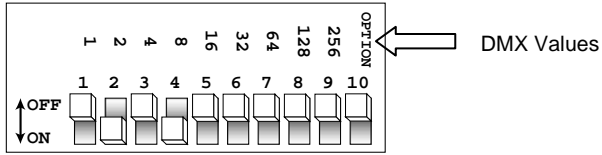
A helpful chart with examples provided on the following page.

Example Starting  
Address

This manual is preliminary and some of the illustrations and functions may have changed prior to final production.

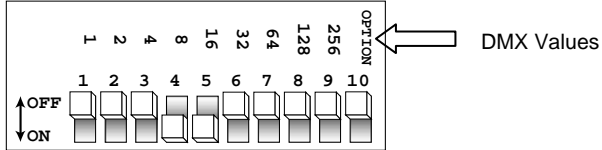
**Address 10**

Pin # 4 = 8  
Pin # 2 = 2  
Total = 10



**Address 24**

Pin # 5 = 16  
Pin # 4 = 8  
Total = 24



Resolving address  
using simple math.

**Address 233**

$233 - (128) = 105$ , Turn ON Dip # 8  
 $105 - (64) = 41$ , Turn ON Dip # 7  
 $41 - (32) = 9$ , Turn ON Dip # 6  
 $9 - (8) = 1$ , Turn ON Dip # 4  
 $1 - (1) = 0$ , Turn ON Dip # 1

You will most likely use the first available number which maybe number 1. This number was selected for example purposes.

Dip Switch	(DMX Value)
------------	-------------

1	1
2	2
3	4
4	8
5	16
6	32
7	64
8	128
9	256
10	

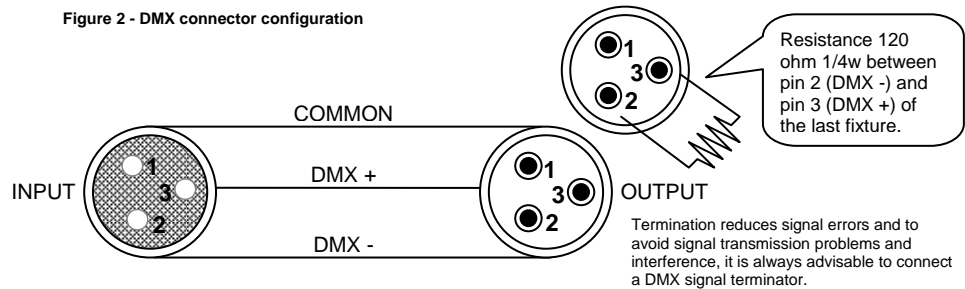
# APPENDIX

## DMX Primer

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+). CHAUVET carries 3-pin XLR DMX compliant cables, DMX-10 (33'), DMX-4.5 (15') and DMX-1.5 (5')

### FIXTURE LINKING



**Note!**

**If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. Chauvet Model No: DMX5M. The chart below details a proper cable conversion:**

3 Pin to 5 Pin Conversion Chart

Conductor	3 Pin Female (output)	5 Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data ( - ) signal	Pin 2	Pin 2
Data ( + ) signal	Pin 3	Pin 3
Do not use		Do not use
Do not use		Do not use

## DMX Channel Values

Channel	Value	Function
1	000 ⇔ 006	<b>Color</b>
	007 ⇔ 013	Color 1
	014 ⇔ 020	Color 2
	021 ⇔ 027	Color 3
	028 ⇔ 034	Color 4
	035 ⇔ 041	Color 5
	042 ⇔ 048	Color 6
	049 ⇔ 055	Color 7
	056 ⇔ 062	Color 8
	063 ⇔ 069	Color 9
	070 ⇔ 076	Color 10
	077 ⇔ 083	Color 11
	084 ⇔ 090	Color 12
	091 ⇔ 097	Color 13
	098 ⇔ 104	Color 14
	105 ⇔ 111	Color 15
	112 ⇔ 118	Color 16
	119 ⇔ 125	Color 17
	126 ⇔ 132	Color 18
	133 ⇔ 139	Color 19
	140 ⇔ 146	Color 20
	147 ⇔ 153	Color 21
	154 ⇔ 160	Color 22
	161 ⇔ 167	Color 23
	168 ⇔ 174	Color 24
	175 ⇔ 181	Color 25
	182 ⇔ 188	Color 26
	189 ⇔ 195	Color 27
	196 ⇔ 202	Color 28
	203 ⇔ 209	Color 29
	210 ⇔ 216	Color 30
	217 ⇔ 223	Color 31
224 ⇔ 239	Color 32	
240 ⇔ 254	Color Fade	
255 ⇔ 255	Color chase slow	
2	000 ⇔ 021	<b>Chase</b>
	022 ⇔ 042	Standard chase (R/G/B)
	043 ⇔ 063	Bright chase
	064 ⇔ 084	Mood chase
	085 ⇔ 105	Spectrum random chase
	106 ⇔ 126	Spectrum sequence chase
	127 ⇔ 147	Dynamic chase
	148 ⇔ 168	R-GB
	169 ⇔ 189	G-BR
	190 ⇔ 210	B-R
	211 ⇔ 231	Y-B
	232 ⇔ 255	R-G
	255 ⇔ 255	Y-G
3	000 ⇔ 255	<b>Speed</b> Slow ⇔ Fast
4	000 ⇔ 255	<b>Dimmer</b> 0% ⇔ 100%

## Maintenance

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components. Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint. Do not touch the lamp glass when cleaning fixture. Oil and dirt can cause damage and premature aging of the lamp. In the event that the lamp is touched or becomes dirty, clean the lamps with an alcohol wipe.

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. - Always dry the parts carefully. - Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

## Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RA #). Products returned without an RA # will be refused. Call CHAUVET and request RA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

## Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

## General Troubleshooting

Symptom	Solution(s)	Applies to			
		Lights	Foggers & Snow	Controllers	Dimmers & Chaser
Auto shut off	Check fan thermal switch reset	✓			
Beam is very dim or not bright	Clean optical system or replace lamp Check 220/110v switch for proper setting	✓			
Breaker/Fuse keeps blowing	Check total load placed on device				✓
Chase is too slow	Check users manual for speed adjustment	✓		✓	✓
Device has no power	Check for power on Mains. Check device's fuse. (internal and/or external)	✓		✓	✓
Fixture is not responding	Check DMX Dip switch settings for correct addressing Check DMX cables Check polarity switch settings	✓			
Fixture is on but there is no movement to the audio	Make sure you have the correct audio mode on the control switches. If audio provided via ¼" jack, make sure a live audio signal exists Adjust sound sensitivity knob	✓		✓	✓
Lamps cuts off sporadically	Possible bad lamp or fixture is overheating. Lamp may be at end of its life.	✓			
Light will not come on after power failure	Some discharge lamps require a cooling off period before the electronics in the fixture can kick start it again, wait 5 to 10 minutes before powering up	✓			
Loss of signal	Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights.	✓	✓	✓	✓
Moves slow	Check 220/110v switch for proper setting	✓			
No flash	Re-install bulb, may have shifted in shipping	✓			
No laser output	Bounce mirror motor may have shifted during shipping, readjust	✓			
No light output	Check slip ring & brushes for contact Install bulb Call service technician	✓			
Relay will not work	Check reset switch Check cable connections				✓
Remote does not work	Make sure connector is firmly connected to device	✓	✓		
Stand alone mode	All Chauvet lighting fixtures featuring stand-alone functions do not require additional settings, simply power the fixture and it will automatically enter into this mode	✓			

## Technical Specifications

### WEIGHT & DIMENSIONS

Length.....	360 mm (14.2 in)
Width.....	225 mm (8.86 in)
Height.....	150 mm (5.9 in)
Weight.....	6 Kg (13.2 lbs)

### POWER

Switch-selectable power settings.....	115V 60 Hz or 230V 50 Hz
European version.....	240V 50 Hz
AC input.....	3-prong IEC 60320 C14

### LAMPS

3 x EHM (115V).....	2,000 hr, 300W
3 x EHM2 (230V).....	2,000 hr, 300W

### THERMAL

Maximum ambient temperature.....	40° (104° F)
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### FUSE

Main.....	30mm Glass 15A Fast Blow
PCB.....	20mm Glass 3A Fast Blow

### CONTROL & PROGRAMMING

Data input.....	locking 3-pin XLR male socket
Data output.....	locking 3-pin XLR female socket
Data pin configuration.....	pin 1 shield, pin 2 (-), pin 3 (+)
Protocols.....	DMX-512 USITT
DMX Channels.....	4

### ORDERING INFORMATION

Stage Wash 900.....	TFX-900
CA-8 Easy Controller.....	CA-8
CA-8F Easy Foot Controller.....	CA-8F
CA-32 Colormix Controller.....	CA-32
CA-32F Colormix foot Controller.....	CA-32F
Fuse 3A.....	P170FUSE003
Fuse 15A.....	P170FUSE015