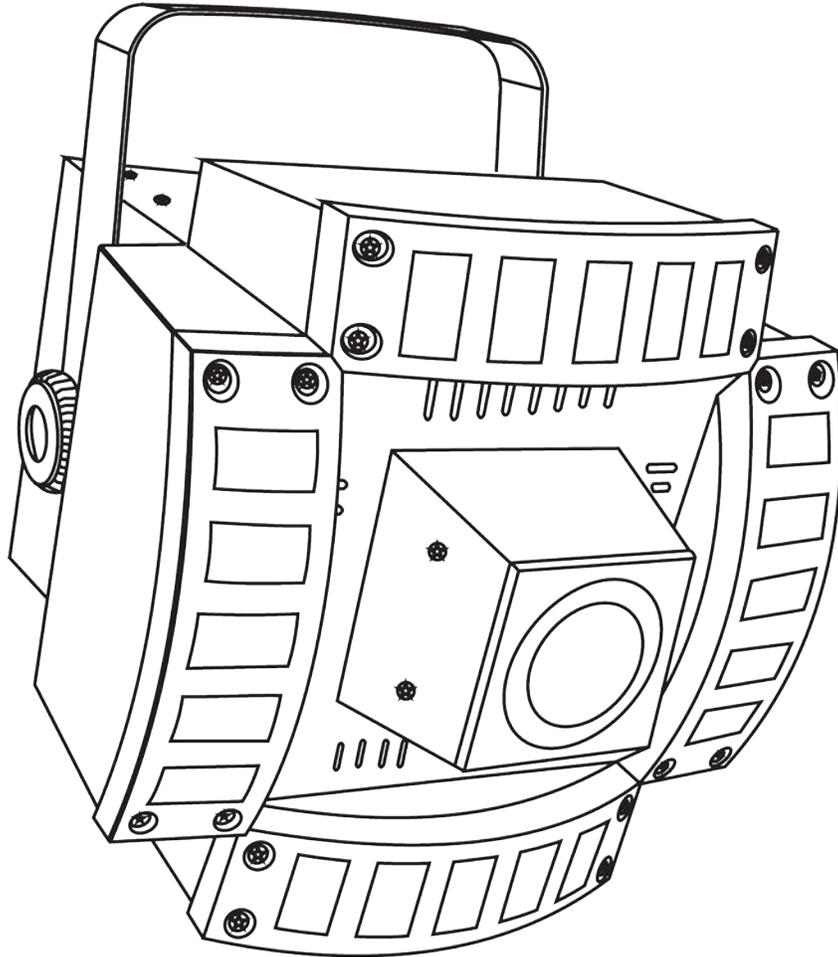


# Cubix™

*User Manual*



**CHAUVET®**  
Value • Innovation • Performance  
It's **Green Thinking™**

---

# TABLE OF CONTENTS

<b>1. Before you Begin</b> .....	<b>3</b>
What is Included.....	3
Unpacking Instructions .....	3
Text Conventions .....	3
Icons .....	3
Safety Notes .....	4
<b>2. Introduction</b> .....	<b>5</b>
<b>3. Setup</b> .....	<b>6</b>
AC Power.....	6
<i>Power Linking</i> .....	6
Mounting .....	7
<i>Orientation</i> .....	7
<i>Rigging</i> .....	7
<b>4. Operation</b> .....	<b>8</b>
Configuration (DMX).....	8
<i>Starting Address</i> .....	8
Configuration (Standalone Modes) .....	9
<i>Sound Active Mode</i> .....	9
<i>Automatic Mode</i> .....	9
<i>Manual Mode</i> .....	9
<i>Master/Slave Mode</i> .....	9
DMX Channel Assignments and Values.....	10
<b>5. Technical Information</b> .....	<b>11</b>
General Maintenance .....	11
General Troubleshooting .....	11
Returns .....	12
Claims.....	12
Contact Us .....	12
<b>6. Technical Specifications</b> .....	<b>13</b>

# 1. BEFORE YOU BEGIN

## What is Included

- 1 x Cubix™
- 1 x Power Cord
- 1 x Warranty Card
- 1 x User Manual

## Unpacking Instructions

Immediately upon receiving this product, carefully unpack it and check the container in which you received it. Make sure that you have received all the parts indicated above and that they are all in good condition. If the material inside the container (this product and any other accessory included with it) appears damaged from shipping, or if the container shows signs of mishandling, notify the shipper immediately. In addition, retain the container and all the packing material for inspection.

See the *Claims* section in the “*Technical Information*” chapter.

## Text Conventions

Convention	Meaning
[10]	A DIP switch to be configured
<Menu>	A key to be pressed on the fixture's control panel
1~512	A range of values
50/60	A set of values of which only one can be chosen
<b>Settings</b>	A menu option not to be modified (for example, showing the operating mode/current status)
<b>Menu &gt; Settings</b>	A sequence of menu options to be followed
ON	A value to be entered or selected

## Icons

Icon	Meaning
	Critical installation, configuration, or operation information. Failure to comply with this information may render the fixture partially or completely inoperative, cause damage to the fixture, or cause harm to the user.
	Important installation or configuration information. Failure to comply with this information may prevent the fixture from functioning correctly.
	Useful information.

## Document Information

The information and specifications contained in this document are subject to change without notice. CHAUVET® assumes no responsibility or liability for any errors or omissions that may appear in this manual.

© Copyright 2012 CHAUVET®. All rights reserved.

Printed in P.R.C.

Electronically published by CHAUVET® in the U.S.A.

Author	Editor	Date
A. Chiappone	S. Graham	3/5/12

---

## Product at a Glance

Use on Dimmer	⊘	Auto Programs	✓
Outdoor Use	⊘	Auto-ranging Power Supply	✓
Sound Activated	✓	Replaceable Fuse	✓
DMX	✓	User Serviceable	⊘
Master/Slave	✓	Duty Cycle	⊘

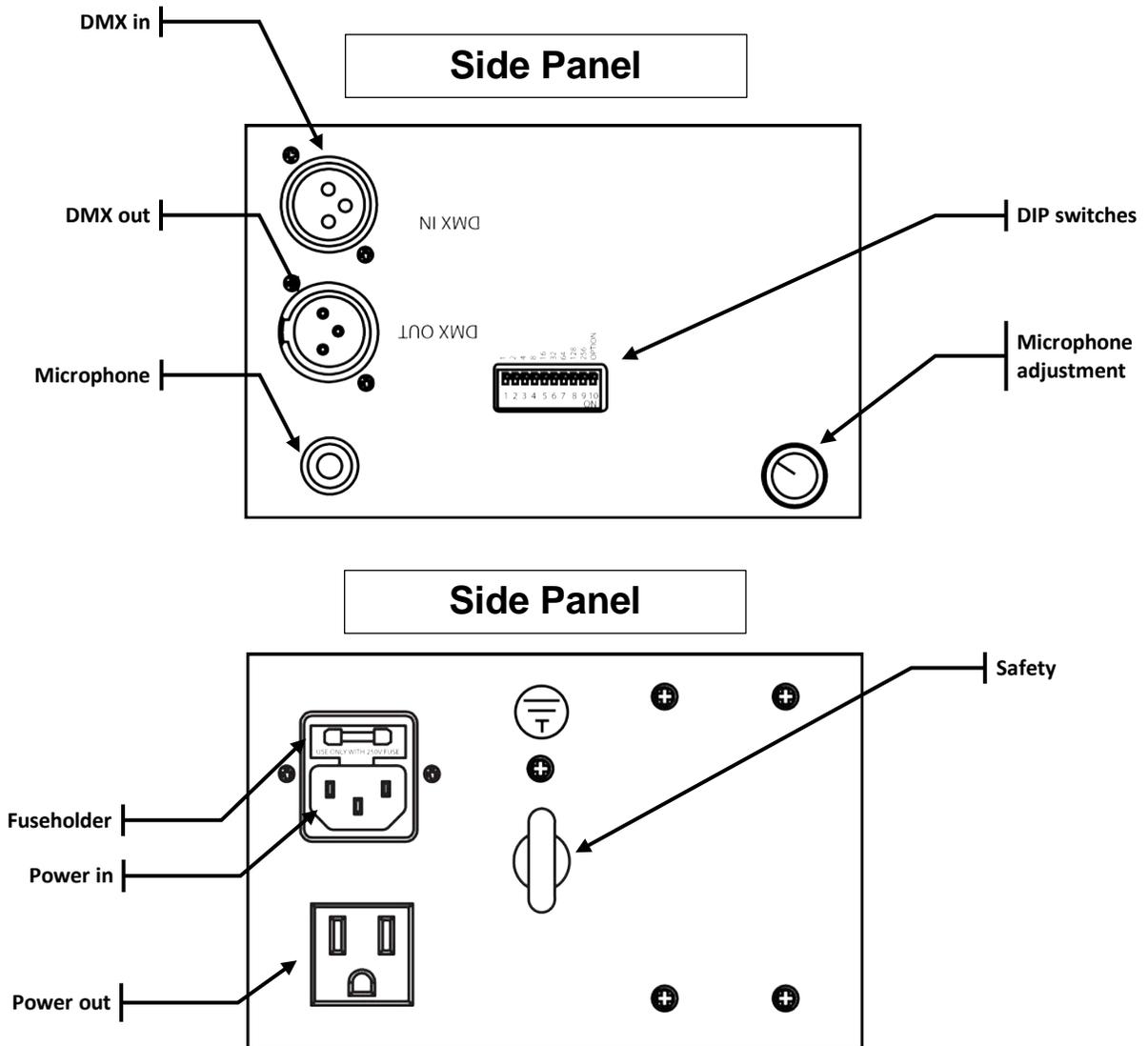
## Safety Notes



**Please read the following notes carefully because they include important safety information about the installation, usage, and maintenance of this product.**

- Keep this User Manual for future consultation. If you sell this product to another user, be sure that they also receive this document.
- Always make sure that the voltage of the outlet to which you are connecting this product is within the range stated on the decal or rear panel of the fixture.
- This product is for indoor use only! To prevent risk of fire or shock, do not expose this fixture to rain or moisture.
- Make sure there are no flammable materials close to the unit while operating.
- Always install this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Be sure that no ventilation slots on the unit's housing are blocked.
- Always disconnect this product from the power source before cleaning it or replacing the fuse.
- Make sure to replace the fuse with another of the same type and rating.
- If mounting this product overhead, always secure it to a fastening device using a safety cable.
- The maximum ambient temperature (Ta) is 104° F (40° C). Do not operate this product at higher temperatures.
- In the event of a serious operating problem, stop using the unit immediately.
- Never try to repair this product. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center.
- Never connect this product to a dimmer pack.
- Make sure the power cord is not crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Never carry a fixture from the power cord or any moving part. Always use the hanging/mounting bracket or the handles.
- Always avoid direct eye exposure to the light source when this fixture is on.

## 2. INTRODUCTION



# 3. SETUP

## AC Power

This product has an auto-ranging power supply and it can work with an input voltage range of 100~240 VAC, 50/60 Hz.

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 indicates its average current draw under normal conditions.



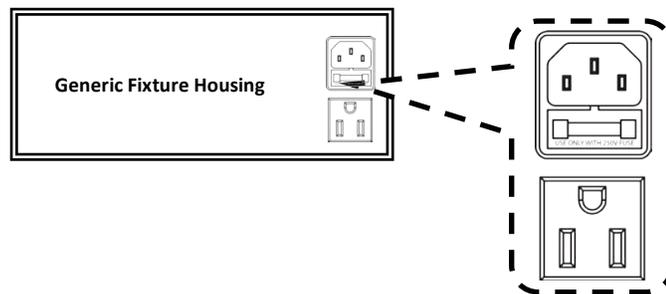
**Always connect this product to a protected circuit (circuit breaker or fuse), making sure that it has an appropriate electrical ground to avoid the risk of electrocution or fire.**



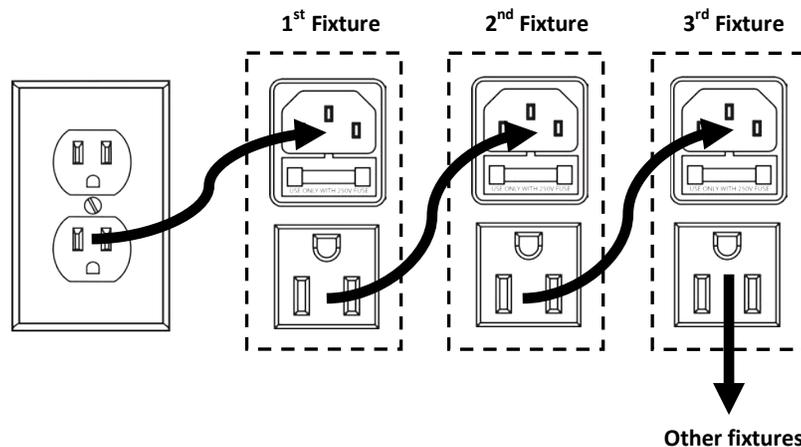
**Never connect this product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.**

### Power Linking

This fixture provides power linking via the Edison/IEC outlet located in the back of the unit. Please see the diagram below for further explanation.



Power Linking Diagram



**You can power link up to 26 Cubix™ units on 120 VAC or up to 45 Cubix™ units on 230 VAC.**



**The power linking diagram shown above corresponds to the North American version of this product ONLY! If using this product in other markets, you must consult with the local CHAUVET® distributor as power linking connectors and requirements may differ in your country or region.**

---

## Mounting

### Orientation

The Cubix™ may be mounted in any position, provided there is adequate room for ventilation around it.

### Rigging

Be sure that the structure onto which you are mounting this product can support its weight. Please see the “Technical Specifications” section of this manual for weight information.

Make sure to mount the fixture securely to a rigging point, whether an elevated platform or a truss.

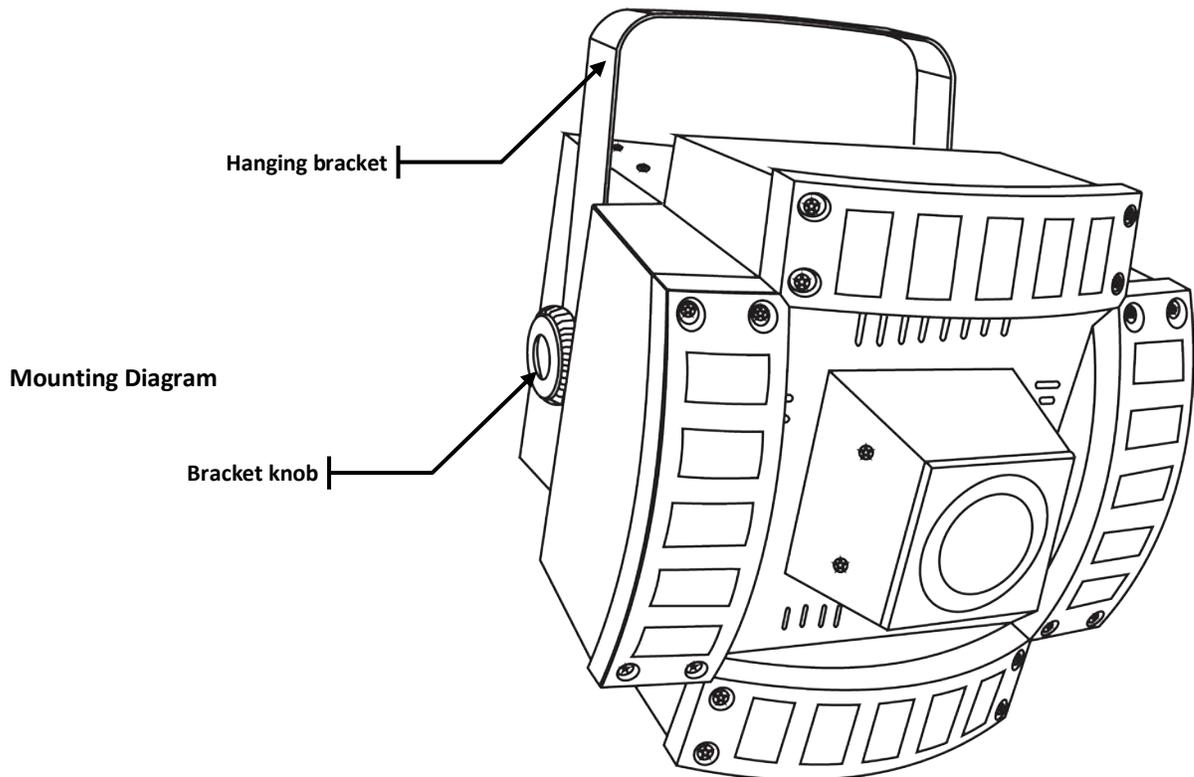
When rigging this product onto a truss, you should use a mounting clamp of appropriate weight capacity. The bracket has a 13 mm hole, which is appropriate for this purpose.

When mounting this product overhead, always use a safety cable.

Before deciding on a location for this product, always make sure that it will be easy to access the unit for maintenance and programming purposes.

When power linking multiple fixtures, you must always consider the length of the power linking cable and mount the fixtures close enough for the cable to reach them.

The bracket knobs allow for directional adjustment when aiming the fixture to the desired angle. Only loosen or tighten the bracket knobs by hand. Using tools could damage the knobs.



---

## 4. OPERATION

### Configuration (DMX)

Set this product in DMX mode to control it with a DMX controller.

- 1) Connect this product to a suitable power outlet.
- 2) Turn this product on.
- 3) Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket of this product.

### Starting Address

When selecting a starting DMX address, always consider the number of DMX channels the selected DMX mode uses. If you choose a starting address that is too high, you could restrict the access to some of the fixture's channels.

The Cubix™ uses one DMX channel in DMX mode, which defines the highest configurable address to 507.

If you are not familiar with the DMX protocol, you may refer to the "DMX Primer" section in the *"Technical Information"* chapter.

To select the starting address, do the following:

- 1) Set DIP [10] to the ON position.
- 2) Using DIP switches [1~9], select the starting address.



If you are not familiar with DMX, download the DMX Primer from [www.chauvetlighting.com](http://www.chauvetlighting.com).

## Configuration (Standalone Modes)

Set this product in one of the standalone modes to control it without a DMX controller.

- 1) Connect this product to a suitable power outlet.
- 2) Turn this product on.

### Sound Active Mode

To enable the Sound Active mode, do the following:

- 1) Set DIP switch [9] to the ON position.
- 2) Turn the music on and adjust the microphone sensitivity knob until the fixture starts reacting to the beat of the music.



**The fixture will only respond to the low frequencies of the music (bass and drums).**

### Automatic Mode



**Never connect a fixture that is operating in any standalone mode, whether Static, Automatic, or Sound to a DMX string connected to a DMX controller. This is because fixtures in standalone mode may transmit DMX signals that could interfere with the DMX signals from the controller.**

To enable the Automatic Mode, follow the instructions below:

- 1) Set DIP switch [8] to the ON position.

### Manual Mode

See the chart below for details on manual DIP switch operation. Some DIP switches may be combined.

Function	DIP switches									
	1	2	3	4	5	6	7	8	9	10
Red	X									
Green		X								
Blue			X							
RGB Strobe (fast)				X						
Center effect					X					
Center strobe (fast)						X				
Motor rotation							X			

### Master/Slave Mode

This mode allows a single Cubix™ unit (the “master”) to control the actions of one or more Cubix™ units (the “slaves”) without the need of a DMX controller. The master unit will be set to operate in either Automatic or Sound Active mode, while the slave units will be set to operate in Slave Mode. Once set and connected, the slave units will operate in unison with the master unit.

Configure the units as indicated below.

#### Slave units:

- 1) Set DIP switch [10] to the ON position.
- 2) Set the DMX address to “001”, as previously explained.
- 3) Connect the DMX input of the first slave unit to the DMX output of the master unit.
- 4) Connect the DMX input of the subsequent slave units to the DMX output of the previous slave unit.
- 5) Finish setting and connecting all the slave units.

#### Master unit:

- 1) Set the master unit to operate in either Automatic or Sound mode, as previously indicated.
- 2) Make the master unit the first unit in the DMX daisy chain.

- **Configure all the slave units before connecting the master unit to the DMX daisy chain.**



- **Never connect a DMX controller to a DMX string configured for Master/Slave operation because it may interfere with the signals from the master unit.**

- **Do not connect more than 31 slave units to the master unit.**

## DMX Channel Assignments and Values

Channel	Function	Value	Setting
1	Operating mode	000 ⇄ 004	No function
		005 ⇄ 028	Red
		029 ⇄ 056	Green
		057 ⇄ 084	Blue
		085 ⇄ 112	Blue/green
		113 ⇄ 140	Red/blue
		141 ⇄ 168	Green/red
		169 ⇄ 197	Red/green/blue
		198 ⇄ 224	Automatic (3-color chase)
225 ⇄ 255	Automatic (7-color chase)		
2	Strobe	000 ⇄ 004	No function
		005 ⇄ 255	Strobe (slow~fast)
3	Motor rotation	000 ⇄ 127	Rotate clockwise
		128 ⇄ 255	Rotate bidirectional (fast~slow)
4	Center effect	000 ⇄ 014	No function
		015 ⇄ 020	Effect 1
		021 ⇄ 026	Effect 2
		027 ⇄ 032	Effect 3
		033 ⇄ 038	Effect 4
		039 ⇄ 044	Effect 5
		045 ⇄ 050	Effect 6
		051 ⇄ 056	Effect 7
		057 ⇄ 062	Effect 8
		063 ⇄ 068	Effect 9
		069 ⇄ 074	Effect 10
		075 ⇄ 080	Effect 11
		081 ⇄ 086	Effect 12
		087 ⇄ 092	Effect 13
		093 ⇄ 098	Effect 14
		099 ⇄ 104	Effect 15
		105 ⇄ 110	Effect 16
		111 ⇄ 116	Effect 17
		117 ⇄ 122	Effect 18
		123 ⇄ 128	Effect 19
		129 ⇄ 134	Effect 20
		135 ⇄ 140	Effect 21
		141 ⇄ 146	Effect 22
		147 ⇄ 152	Effect 23
		153 ⇄ 158	Effect 24
		159 ⇄ 164	Effect 25
		165 ⇄ 170	Effect 26
		171 ⇄ 176	Effect 27
		177 ⇄ 182	Effect 28
		183 ⇄ 188	Effect 29
		189 ⇄ 194	Effect 30
195 ⇄ 200	Effect 31		
201 ⇄ 206	Effect 32		
207 ⇄ 212	Effect 33		
213 ⇄ 218	Effect 34		
219 ⇄ 224	Effect 35		
225 ⇄ 230	Effect 36		
231 ⇄ 236	Effect 37		
237 ⇄ 242	Effect 38		
243 ⇄ 248	Effect 39		
249 ⇄ 255	Effect 40		
5	Center effect speed	000 ⇄ 015	Stop
		016 ⇄ 255	Speed (slow~fast)
6	Center strobe	000 ⇄ 015	No function
		016 ⇄ 255	Strobe (slow~fast)

## 5. TECHNICAL INFORMATION

### General Maintenance

Dust build up reduces light output performance and can cause overheating. This can lead to reduction of the light source's life and/or mechanical wear. To maintain optimum performance and minimize wear, you should clean your lighting fixtures at least twice a month. However, be aware that usage and environmental conditions could be contributing factors to increase the cleaning frequency.

To clean this fixture, follow the instructions below:

- Unplug the fixture from power.
- Wait until the fixture is cold.
- Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external surface/vents.
- Clean all external glass surfaces with a mild soap solution, ammonia-free glass cleaner, or isopropyl alcohol.
- Apply the solution directly to a soft, lint free cotton cloth or a lens cleaning tissue.
- Softly drag any dirt or grime to the outside of the external glass surface.
- Gently polish the external glass surfaces until they are free of haze and lint.



**Always dry the external glass surfaces carefully after cleaning them.**

### General Troubleshooting

Symptom	Possible Cause	Possible Action
Circuit breaker or fuse keeps blowing	Excessive load on the circuit	Make sure that the total load does not exceed 80% of the breaker or fuse nominal current
	Short circuit along the power lines	Check the power lines and power cords
Product does not power up	No energy on power outlet	Check power outlet Change to another outlet
	Loose or damaged power cord	Check the power cord
	Blown fuse	Replace blown fuse with a good one of the same type and rating
	Internal problem	Send product for repair
Fixture does not respond to DMX	Wrong starting address on the fixture	Set the correct starting address on the fixture Use the right fader(s) on the controller
	Wrong polarity setting on the DMX controller	Change the signal polarity on the controller
	Loose or damaged DMX cable	Check the DMX cable before the faulty unit
	Internal problem	Send product for repair
Intermittent DMX Problems	Signal cables are not DMX compatible	Replace non DMX cables with true DMX cables
	Interference with AC or radio signals	Keep DMX cables away from AC wires or radio equipment
	DMX cable too long	Install an optically coupled DMX amplifier right before the fixture with intermittent problems
	Too many fixtures connected	Install an optically coupled DMX amplifier after unit #32
	Terminator not connected	Install a terminator.



**If you still experience problems after trying the above solutions, contact CHAUVET® Technical Support.**

---

## Returns

The user must send the merchandise prepaid, in the original box, and with its original packing and accessories. CHAUVET® will not issue call tags.

Call CHAUVET® and request a Return Merchandise Authorization (RMA) number before shipping the fixture. Be prepared to provide the model number, serial number, and a brief description of the cause for the return.

The user must clearly label the package with a Return Merchandise Authorization (RMA) number. CHAUVET® will refuse any product returned without an RMA number.



**DO NOT write the RMA number directly on the box. Instead, write it on a properly affixed label.**

Once you have received the RMA number, please include the following information on a piece of paper inside the box:

- Your name
- Your address
- Your phone number
- The RMA number
- A brief description of the problem

Be sure to pack the fixture properly. Any shipping damage resulting from inadequate packaging will be the customer's responsibility. As a suggestion, proper UPS packing or double-boxing is always a safe method to use.



**CHAUVET® reserves the right to use its own discretion to repair or replace returned product(s).**

## Claims

The carrier is responsible for any damage incurred during shipping to this product or any part that shipped with it. Therefore, if the received merchandise appears to have damages caused during shipping, the customer must submit the damage report and any related claims with the carrier, not CHAUVET®. The customer must submit the report upon reception of the damaged merchandise. Failure to do so in a timely manner may invalidate the customer's claim with the carrier.

For other issues such as missing components or parts, damage not related to shipping, or concealed damage, the customer must make claims to CHAUVET® within seven (7) days of receiving the merchandise.

## Contact Us

### World Headquarters

CHAUVET®

#### General Information

Address: 5200 NW 108th Avenue  
Sunrise, FL 33351  
Voice: (954) 929-1115  
Fax: (954) 929-5560  
Toll free: (800) 762-1084

#### Technical Support

Voice: (954) 929-1115 (Press 4)  
Fax: (954) 756-8015  
Email: tech@chauvetlighting.com

#### World Wide Web

[www.chauvetlighting.com](http://www.chauvetlighting.com)

### United Kingdom & Ireland

CHAUVET® Europe Ltd.

#### General Information

Address: Unit 1C  
Brookhill Road Industrial Estate  
Pinxton, Nottingham, UK  
NG16 6NT  
Voice: +44 (0)1773 511115  
Fax: +44 (0)1773 511110

#### Technical Support

Email: uktech@chauvetlighting.com

#### World Wide Web

[www.chauvetlighting.co.uk](http://www.chauvetlighting.co.uk)

## 6. TECHNICAL SPECIFICATIONS

### Dimensions and Weight

Length	Width	Height	Weight
13.3 in (337 mm)	10 in (255 mm)	10 in (255 mm)	7.5 lbs (3.4 kg)

**Note:** Dimensions in inches rounded to the nearest decimal digit.

### Power

Power Supply Type	Range	Voltage Selection
Switching (internal)	100–240 V, 50/60 Hz	Auto-ranging
Parameter	120 V, 60 Hz	230 V, 50 Hz
Consumption	37 W (0.31 A)	41 W (0.18 A)
Power I/O	Input	Output
Connectors	IEC	Edison/IEC
Cord plug	Edison	N/A

### Light Source (tri-color)

Type	Power	Lifespan
LED	3 W (total)	50,000 hours
Color	Current	
Red	960 mA	
Green	520 mA	
Blue	370 mA	

### Light Source (5 mm)

Type	Size	Current
LED	5 mm	20 mA

### Photo Optic

Parameter	Value
Coverage angle	111°

### Thermal

Maximum External Temp.	Cooling System
104° F (40° C)	Convection

### DMX

I/O Connectors	Connector Type	Channel Range
3-pin XLR	Sockets	6

### Ordering

Item Name	Item Number	Item Code
Cubix™	CUBIX	07050334



UL 1573  
CSA C22.2 No. 166  
E113093