

# LRG-55 Scorpion™ 55 RG

*USER MANUAL*



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# TABLE OF CONTENT

<b>BEFORE YOU BEGIN</b> .....	<b>3</b>
WHAT IS INCLUDED.....	3
UNPACKING INSTRUCTIONS.....	3
AC POWER.....	3
SAFETY INSTRUCTIONS.....	4
<b>INTRODUCTION</b> .....	<b>5</b>
FEATURES.....	5
DMX CHANNEL SUMMARY.....	5
PRODUCT OVERVIEW.....	6
GENERAL INSTRUCTIONS.....	7
<b>COMPLIANCE STATEMENT</b> .....	<b>8</b>
LASER SAFETY AND COMPLIANCE INFORMATION.....	8
PROPER USAGE.....	9
<b>CONTROL &amp; FUNCTION</b> .....	<b>9</b>
DIPSWITCH CHART.....	9
DMX MODE.....	10
Setting the starting address.....	10
OPERATION.....	11
Stand-Alone Operation (Sound_Active, Auto Mode):.....	11
Master-Slave Operation (Master_Sound, Master_Auto):.....	11
Universal DMX Control (DMX Mode):.....	12
TROUBLE SHOOTING.....	12
<b>APPENDIX</b> .....	<b>13</b>
DMX PRIMER.....	13
Fixture Linking.....	13
DMX QUICK REFERENCE CHART.....	14
DMX CHANNEL VALUES.....	15
TROUBLE SHOOTING.....	15
DYNAMIC PATTERNS & DMX VALUES.....	16
STATIC PATTERNS & DMX VALUES.....	17
GENERAL MAINTENANCE.....	18
RETURNS PROCEDURE.....	18
CLAIMS.....	18
TECHNICAL SPECIFICATIONS.....	19
TECHNICAL SUPPORT.....	19

# BEFORE YOU BEGIN

## What is included

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- 1 x Scorpion™ 55 RG
- Warranty Card
- User Manual
- Power cord

## Unpacking Instructions

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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

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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.

### **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.**

Figure 1 - AC Voltage Switch



Not all fixtures have a voltage select switch. Please be sure to connect to the proper voltage.



**CAUTION:** Do not use Optical Instruments such as binoculars, telescopes, or extreme prescription glasses to view the laser. These instruments may intensify the laser power and cause serious injury to your eyes

## Safety Instructions

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**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  $T_a: 35^\circ$ . 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

You may notice that both the red and green beams coming out of the projector are larger than the 4.95mW projectors. There is a very distinct reason for this. Unlike 4.95mW projectors the output of the CHAUVET laser projectors with Fatbeam™ technology inside outputs <20mW for each beam. Normally outputs greater than 4.95mW require a variance from the FDA. This product has been designed to meet a special classification of ClassIIIR. Under this classification with the Fatbeam™ technology the acceptable energy levels (AEL) have been met. Therefore the maximum potential exposure to the unaided eye is less than 4.95mW for a static beam. Additionally the (MPE) or Maximum Permissible Exposure with this product is below acceptable levels for human ocular or tissue exposure.

## Features

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### CONTROL FEATURES

- 8-channel DMX controlled green and red laser
- 41 Dynamic, 50 Static patterns, laser off & sound active mode
  - Scan and speed adjustment yields 500 laser effects
  - 44 patterns in sound active mode
  - 48 patterns in auto mode
- X and Y position adjustment of laser effect
  - X moves lasers in opposite movements
  - Y moves lasers in unison
- Dynamic Scan speed adjust
- Dynamic pattern speed adjust
- Static pattern size adjust
- Laser color selection; red, green or both red & green

### FEATURES

- Dual 10mW Fatbeam™ Laser technology produces 10-14mm beam which complies with IEC Safety Standards under ClassIIIR
- Operating modes; Auto, Sound Active, Master/Slave & DMX
- Safety cover for scanner mirrors
- Sound sensitivity control
- Sound activated via DMX
- Scanning motors (micro stepping)
- Rugged construction
- Fan cooled

## DMX Channel Summary

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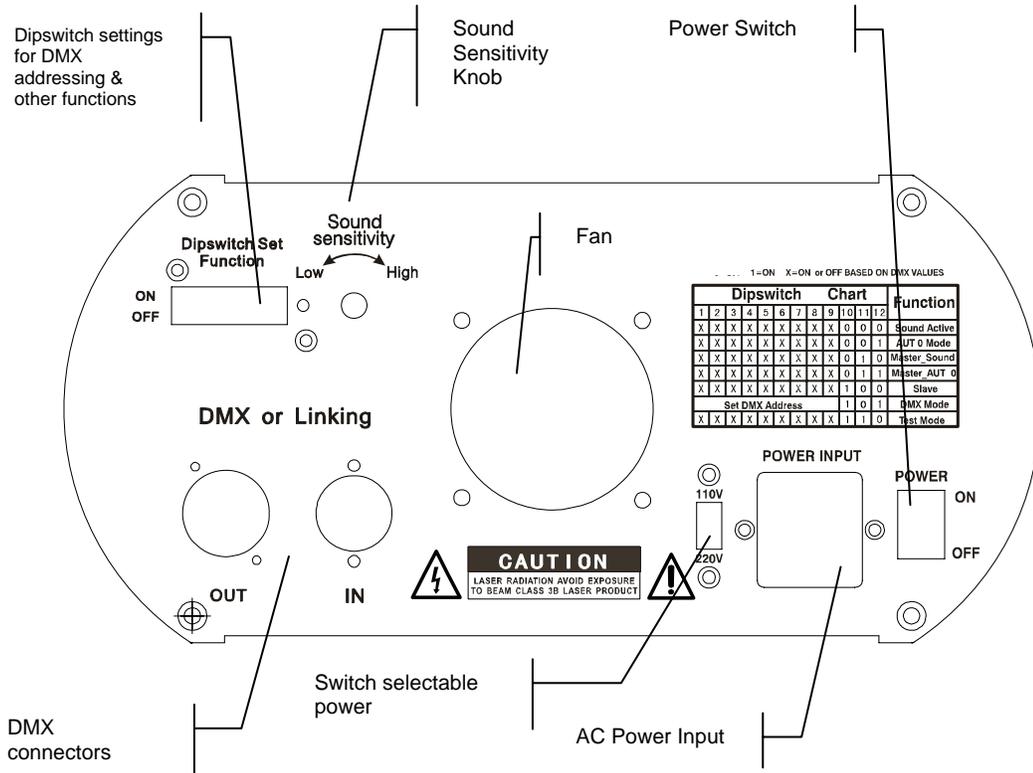
CHANNEL	FUNCTION
1	Mode
2	Pattern Selection
3	X Position
4	Y Position
5	Scan speed
6	Dynamic Pattern select
7	Static Pattern size
8	Color

# Product Overview



**AVOID EXPOSURE**  
Visible and/or Invisible  
LASER RADIATION EMITTED  
FROM THIS APERTURE

**DANGER: Laser Radiation emitted from this aperture.**  
Before connecting the unit to AC power, make certain that the front aperture is pointed away from you or others.



**AC Power Connection:**

The unit is supplied with a power plug appropriate to its voltage and destination. Should any other connections be required they must be carried out with the following configuration.

Earth = Green/Yellow cable  
Neutral = Blue cable  
Live = Brown cable

## General Instructions

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Please read carefully and thoroughly the contents of this manual before operating the Laser system. These instructions contain important safety information regarding the use and maintenance of this system. Please keep this manual for future reference.

- Every unit has been thoroughly tested and has been shipped in perfect operating condition.
- Check the shipping carton for damage that may have occurred during shipping.
- If the carton appears to be damaged carefully inspect your unit for any damage.
- Be sure all equipment necessary to operate the system has arrived intact.
- In the event that damage has been found or parts are missing, please contact CHAUVET customer support for further instructions.
- Please do not return the unit to your dealer without first contacting CHAUVET customer support.

**Notice!**

- 1) Please insure the power supply has good connect with ground before operating the unit in order to prevent electrical shock.
- 2) This system is intended to only be operated indoors. Avoid any direct contact with water, and make certain the unit is firmly mounted.
- 3) Ensure the operating temperature is within the specified normal range of 18-30<sup>o</sup> C.
- 4) Prolonged operation shortens the life of the laser device.
- 5) The system over a long period of time may build up dust and other contaminants on the scanner optics and or the aperture window.
- 6) Do not remove any of the laser safety warning labels, manufacturing label, and warranty labels. If the warranty labels are broken the warranty will be voided.
- 7) Please contact us if you experience any problems with this unit.
- 8) **NO USER SERVICABLE PARTS INSIDE:**  
Warranty Void if Warranty Seals are missing or appear tampered with.
- 9) Please do not discard the shipping materials. In the event you must return the unit please do so in the original factory packaging to avoid further damage.

**WARRANTY VOID**  
If seal is broken or has been tampered with

# COMPLIANCE STATEMENT

Your LRG-55 complies with FDA/CDRH 21CFR1040 and Laser Notice 50 as well as IEC 60825-1:2003. Due to a unique optic design, this product does not exceed output powers that exceed its classification and output levels government agencies have determined to be appropriate for the products function.

## Laser Safety and Compliance Information

This product is manufactured to comply with the IEC 60825-1 and in accordance with U.S. Food and Drug Administrations (FDA) Standards listed under FDA Document 21 CFR 1040 and subsequent laser notices.

Product Classification and Manufacturing Label Identification

<b>Laser Classification</b>	Class IIIa
<b>Laser Medium</b>	DPSS YVO4 532nm / Diode 650nm
<b>Cooling</b>	Fan Cooled
<b>Output</b>	Dual <20mW
<b>Beam Diameter at aperture</b>	10 – 14mm
<b>Beam Divergence</b>	Optically adjusted for compliance
<b>Radiant Exposure at Aperture</b>	<4.95mW (7mm Human Limiting Aperture)

There is only one laser aperture on this product.



**DANGER** – Visible and invisible Laser radiation when open. Avoid Direct Eye or Skin Exposure

**AVOID EXPOSURE**  
Visible and/or Invisible LASER RADIATION EMITTED FROM THIS APERTURE

**CAUTION: AVOID EXPOSURE TO BEAM:** Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser radiation.

**Non-Interlocked Housing Warning Labels.** This unit contains an embedded laser device that exceeds the output of the intended class internally. Exposure to unsafe levels of laser radiation when opened.

<b>DANGER</b>	CHAUVET Lighting 3000 N. 29th Court Hollywood, FL 33020 1-954-929-1115
VISIBLE OR INVISIBLE LASER RADIATION AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION  LASER OUTPUT: <5mW WAVELENGTH(S): 532nm DPSS & 650nm Laser Diode CLASS IIIa LASER PRODUCT	
Complies with 21CFR 1040.10 and 1540.11 and Laser Notice 50	
<b>Chauvet Lighting-Product Information</b>	
MODEL	<input type="text"/>
Date of Manufacturing	<input type="text"/>
Serial Number	<input type="text"/>

**WARRANTY VOID**  
If seal is broken or has been tampered with

**Additionally there are no user serviceable parts inside.** Tampering or removing warranty seals will void your products limited warranty.

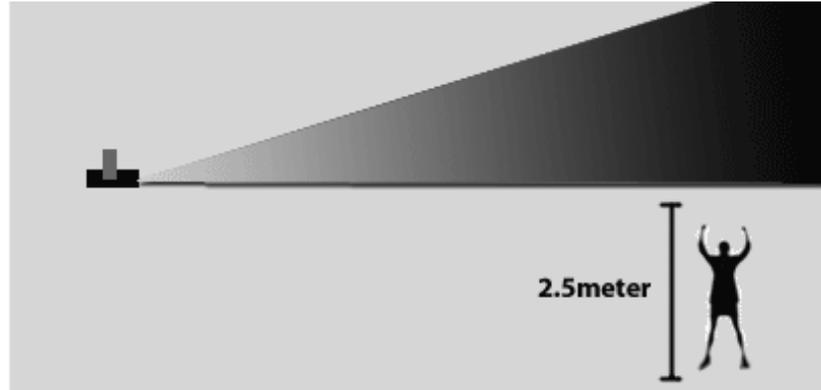
**CAUTION:**

The use of corrective eye wear or optics for viewing at distances such as telescopes or binoculars within a distance of 100mm may pose an eye hazard.

## Proper Usage

This unit has been designed to be hung. It is recommended that, for safety purposes, your lighting effect are properly mounted using a suitable hanging clamp and safety cable. **CHAUVET** offers a range of items, which are ideal for safe mounting.

It is the responsibility of the manufacturer to provide useful instruction on the proper use of this product. According to FDA Regulations you should operate the product in the fashion illustrated below.



**CAUTION: Use of controls, adjustments, or performance of procedures other than what is specified herein may result in hazardous radiation exposure**

## CONTROL & FUNCTION

This unit uses dipswitches to assign a units function, DMX address and DMX MODE of function. Each dipswitch represents a binary value.

### Dipswitch Chart

0=OFF 1=ON X=OFF or ON

DIPSWITCH CHART											FUNCTION	
1	2	3	4	5	6	7	8	9	10	11	12	
X	X	X	X	X	X	X	X	X	0	0	0	SOUND ACTIVE
X	X	X	X	X	X	X	X	X	0	0	1	AUTO MODE
X	X	X	X	X	X	X	X	X	0	1	0	MASTER_SOUND
X	X	X	X	X	X	X	X	X	0	1	1	MASTER_AUTO
X	X	X	X	X	X	X	X	X	1	0	0	SLAVE
SET DMX ADDRESS									1	0	1	DMX MODE
X	X	X	X	X	X	X	X	X	1	1	0	TEST MODE

Function chart

Dipswitches #10,#11,and #12 is set system function, from #1 to #9 is set DMX512 address in DMX MODE.

# DMX Mode

In this mode you will be able to control each individual trait of the fixture independently. The LRG-55 occupies 8 channels of DMX control. For detailed listing of the DMX channel values refer to the Appendix section.

## 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.

### EXAMPLE STARTING ADDRESS

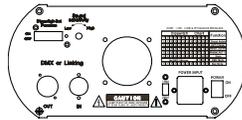
<p><b>Address 10</b></p> <p>Pin # 4 = 8 Pin # 2 = 2 Total = 10</p>	<p>1 2 4 8 16 32 64 128 256      DIP</p> <p>1 2 3 4 5 6 7 8 9 10 11 12</p> <p>▲ ON ▼ OFF</p>																				
<p><b>Address 24</b></p> <p>Pin # 5 = 16 Pin # 4 = 8 Total = 24</p>	<p>1 2 4 8 16 32 64 128 256      DIP</p> <p>1 2 3 4 5 6 7 8 9 10 11 12</p> <p>▲ ON ▼ OFF</p>																				
<p><b>Resolving address using simple math.</b></p> <p><b>Address 233</b></p>	<p>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</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>DIP SWITCH</th> <th>(DMX VALUE)</th> </tr> </thead> <tbody> <tr><td>1</td><td>1</td></tr> <tr><td>2</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>4</td><td>8</td></tr> <tr><td>5</td><td>16</td></tr> <tr><td>6</td><td>32</td></tr> <tr><td>7</td><td>64</td></tr> <tr><td>8</td><td>128</td></tr> <tr><td>9</td><td>256</td></tr> </tbody> </table> <p>You will most likely use the first available number which maybe number 1. This number was selected for example purposes.</p>	DIP SWITCH	(DMX VALUE)	1	1	2	2	3	4	4	8	5	16	6	32	7	64	8	128	9	256
DIP SWITCH	(DMX VALUE)																				
1	1																				
2	2																				
3	4																				
4	8																				
5	16																				
6	32																				
7	64																				
8	128																				
9	256																				

## Operation

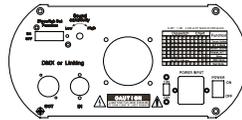
### Stand-Alone Operation (Sound\_Active, Auto Mode):

This mode allows a single unit to run to the beat of the music, or the unit will auto change in Auto Mode.

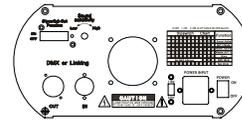
- 1) Set dipswitches position to Sound Active or Auto Mode.  
 Mode                                      Dipswitches  
 Sound Active                              10 = Off, 11 = Off, 12 = Off  
 Auto Mode                                    10 = Off, 11 = Off, 12 = On
- 2) The unit will react to the low frequencies of music via the internal microphone in Sound Active mode, or the unit will auto change in Auto Mode.
- 3) Use the audio sensitivity knob on the back of the unit to make the unit more or less sensitive in Sound Active.



N: SOUND/AUDIO



2: SOUND/AUTO

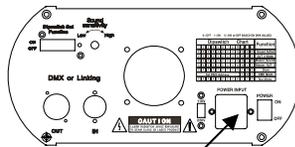


1: SOUND/AUTO

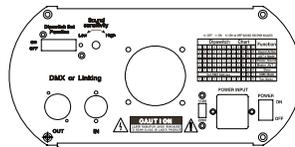
### Master-Slave Operation (Master\_Sound, Master\_Auto):

This mode will allow you to link up to 32 units together without controller.

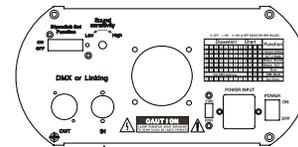
- 1) Use standard XLR DMX cable to daisy chain your units together via the XLR connector on the rear of the units. For longer cable runs we suggest a terminator on the last fixture.
- 2) Choose a unit to function as Master mode. Turn dipswitches to the Master position on the unit. The unit must be first unit in line. Then simply chain the units together using XLR cable.  
 Mode                                      Dipswitches  
 Master Sound                              10 = Off, 11 = On, 12 = Off  
 Master Auto                                10 = Off, 11 = On, 12 = On
- 3) Turn switch to the Slave position on the slave units, and they will react the same as the Master.  
 Mode                                      Dipswitches  
 Slave                                        10 = On, 11 = Off, 12 = Off



1: MASTER



2: SLAVE



N: SLAVE



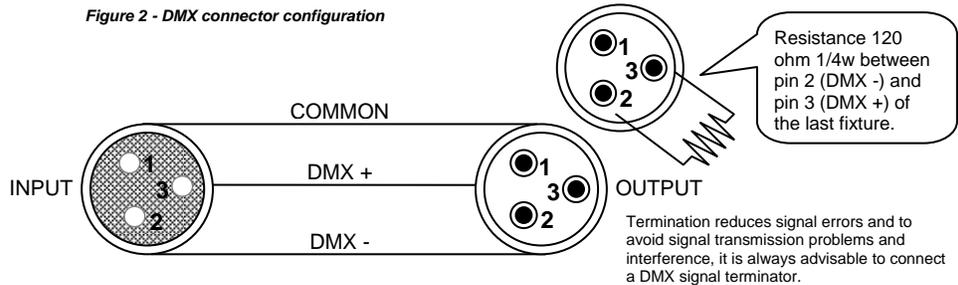
# APPENDIX

## 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 Quick Reference Chart

## DMX Address Quick Reference Chart

Dip Switch Position

DMX DIP SWITCH SET 0=OFF 1=ON X=OFF or ON					#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1		
					#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	
					#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	
					#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1
#1	#2	#3	#4	#5																		
0	0	0	0	0		32	64	96	128	160	192	224	256	288	320	352	384	416	448	480		
1	0	0	0	0	1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481		
0	1	0	0	0	2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482		
1	1	0	0	0	3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483		
0	0	1	0	0	4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484		
1	0	1	0	0	5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485		
0	1	1	0	0	6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486		
1	1	1	0	0	7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487		
0	0	0	1	0	8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488		
1	0	0	1	0	9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489		
0	1	0	1	0	10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490		
1	1	0	1	0	11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491		
0	0	1	1	0	12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492		
1	0	1	1	0	13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493		
0	1	1	1	0	14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494		
1	1	1	1	0	15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495		
0	0	0	0	1	16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496		
1	0	0	0	1	17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497		
0	1	0	0	1	18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498		
1	1	0	0	1	19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499		
0	0	1	0	1	20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500		
1	0	1	0	1	21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501		
0	1	1	0	1	22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502		
1	1	1	0	1	23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503		
0	0	0	1	1	24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504		
1	0	0	1	1	25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505		
0	1	0	1	1	26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506		
1	1	0	1	1	27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507		
0	0	1	1	1	28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508		
1	0	1	1	1	29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509		
0	1	1	1	1	30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510		
1	1	1	1	1	31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511		

Dip Switch Position

DMX Address

## DMX Channel Values

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Channel	Value	Function
1	000 ⇔ 010 011 ⇔ 120 121 ⇔ 250 251 ⇔ 255	<b>Mode</b> Laser off Dynamic Patterns Static Patterns Sound Active Mode
2	000 ⇔ 255	<b>Pattern Selection</b> Static Patterns – Dynamic Patterns
3	000 ⇔ 255	<b>X Position</b> Left > Right
4	000 ⇔ 255	<b>Y Position</b> Top > Bottom
5	000 ⇔ 255	<b>Scan Speed</b> Fast > Slow
6	000 ⇔ 255	<b>Dynamic Pattern Speed Control</b> Fast > Slow / See page 16
7	000 ⇔ 255	<b>Static Pattern Size Control</b> Small > Big / See page 17
8	000 ⇔ 100 101 ⇔ 200 201 ⇔ 255	<b>Color</b> Green & Red ON Green Red
NOTES	Some Static patterns can adjust both in size and position.	

**CAUTION: Use of controls, adjustments, or performance of procedures other than what is specified herein may result in hazardous radiation exposure**

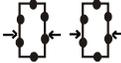
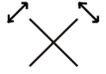
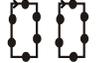
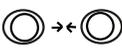
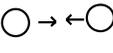
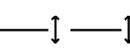
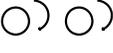
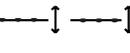
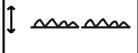
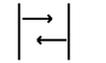
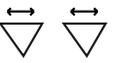
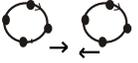
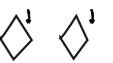
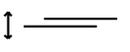
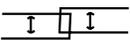
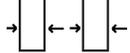
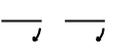
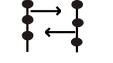
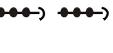
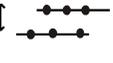
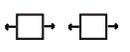
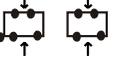
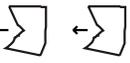
## Trouble Shooting

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- 1) If the power supply indicator does not light up and the laser does not work, please check if the power supply and the corresponding parts have the right input electric current.
- 2) If it is in stand-alone mode operation, the power supply indicator is lit and the laser is not working, please check if the operation system is set up in Master/Slave mode.
- 3) If it is in Master/Slave mode, Slave mode is exceptional, please check as below:
  - A. Make sure to set up Master mode for just one unit and the others are set in slave mode.
  - B. Make sure to control the unit with DMX controller.
  - C. Make sure to take a good quality power cord and connection.
- 4) If the unit is in DMX mode, the laser cannot be controlled by the DMX controller, and the DMX signal indicator is not illuminated please check as below:
  - A. Make sure to set up the DMX mode.
  - B. Make sure to have a good connection.
- 5) If it is in DMX mode, the laser is cannot be controlled by the DMX controller but the DMX signal indicator flashes, please make sure the DMX controller and the laser have the same DMX Address.
- 6) If the no laser outputs from the projector please restart the AC power by turning off the AC switch and leaving off for 15 seconds and then turning the switch back to the on position.
- 7) If the test pattern is not in the proper position restart the AC power by turning off the AC switch and leaving off for 15 seconds and then turning the switch back to the on position.

**After trying the above solution you still have a problem, please contact CHAUVET.**

# Dynamic Patterns & DMX Values

VALUE	DYNAMIC PATTERNS	VALUE	DYNAMIC PATTERNS	VALUE	DYNAMIC PATTERNS
0-4		85-89		170-174	
5-9		90-94		175-179	
10-14		95-99		180-184	
15-19		100-104		185-189	
20-24		105-109		190-194	
25-29		110-114		195-199	
30-34		115-119		200-204	
35-39		120-124		205-209	
40-44		125-129		210-214	
45-49		130-134		215-219	
50-54		135-139		220-224	
55-59		140-144		225-229	
60-64		145-149		230-234	
65-69		150-154		235-239	
70-74		155-159		240-244	
75-79		160-164		245-249	
80-84		165-169		250-254	

## Static Patterns & DMX Values

VALUE	STATIC PATTERNS	VALUE	STATIC PATTERNS	VALUE	STATIC PATTERNS
0 <sup>-</sup> 5		90 <sup>-</sup> 95		180 <sup>-</sup> 185	
6 <sup>-</sup> 11		96 <sup>-</sup> 101		186 <sup>-</sup> 191	
12 <sup>-</sup> 17		102 <sup>-</sup> 107		192 <sup>-</sup> 197	
18 <sup>-</sup> 23		108 <sup>-</sup> 113		198 <sup>-</sup> 203	
24 <sup>-</sup> 29		114 <sup>-</sup> 119		204 <sup>-</sup> 209	
30 <sup>-</sup> 35		120 <sup>-</sup> 125		210 <sup>-</sup> 215	
36 <sup>-</sup> 41		126 <sup>-</sup> 131		2216 <sup>-</sup> 221	
42 <sup>-</sup> 47		132 <sup>-</sup> 137		222 <sup>-</sup> 227	
48 <sup>-</sup> 53		138 <sup>-</sup> 143		228 <sup>-</sup> 233	
54 <sup>-</sup> 59		144 <sup>-</sup> 149		234 <sup>-</sup> 239	
60 <sup>-</sup> 65		150 <sup>-</sup> 155		240 <sup>-</sup> 245	
66 <sup>-</sup> 71		156 <sup>-</sup> 161		246 <sup>-</sup> 251	
72 <sup>-</sup> 77		162 <sup>-</sup> 167		252 <sup>-</sup> 254	
78 <sup>-</sup> 83		168 <sup>-</sup> 173			
84 <sup>-</sup> 89		174 <sup>-</sup> 179			

## General Maintenance

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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.

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

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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

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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.

## Technical Specifications

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### WEIGHT & DIMENSIONS

Length..... 256 mm (10.08 in)  
Width ..... 270 mm (10.63 in)  
Height ..... 130 mm (5.12 in)  
Weight ..... 4.25 Kg (9.37 lbs)

### POWER

Switch-selectable power settings ..... 120V 60Hz AC or 230V 50Hz  
Fuse..... 2A 250V  
Current draw ..... (peak 25W @ 120V), (peak 25W @ 230V)

### LASER

Rated power ..... 20W  
Diode ..... 1 x 10mW green laser  
Diode ..... 1 x 10mW red laser  
Wavelength..... 532 nm & 650 nm  
Pan ..... 97°  
Tilt..... 47°  
Part No ..... 10mW Green  
Laser Type..... DPSS  
Laser Output..... Dual <20mW  
Cooling ..... Fan Cooled

### 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 ..... 8

### ORDERING INFORMATION

Scorpion™ 55 RG ..... LRG-55

## Technical Support

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Address: Service Dept.  
3000 N 29th Ct, Hollywood, FL 33020 (U.S.A.)  
Support (Email): [tech@chauvetlighting.com](mailto:tech@chauvetlighting.com)  
Telephone: (954) 929-1115 - (Press 4)  
Fax: (954) 929-5560 - (Attention: Service)  
Website: <http://www.chauvetlighting.com>