

# CH-540 ThunderBall™

*USER MANUAL*



Chauvet, 3000 N 29<sup>th</sup> Ct, Hollywood, FL 33020 U.S.A  
(800) 762-1084 – (954) 929-1115  
FAX (954) 929-5560  
[www.chauvetlighting.com](http://www.chauvetlighting.com)

# TABLE OF CONTENT

<b>TABLE OF CONTENT</b> .....	<b>2</b>
<b>BEFORE YOU BEGIN</b> .....	<b>3</b>
WHAT IS INCLUDED .....	3
UNPACKING INSTRUCTIONS .....	3
AC POWER .....	3
SAFETY INSTRUCTIONS .....	3
<b>INTRODUCTION</b> .....	<b>4</b>
FEATURES .....	4
PRODUCT OVERVIEW .....	4
<b>SETUP</b> .....	<b>5</b>
LAMP .....	5
<i>Lamp installation</i> .....	5
MOUNTING .....	5
<i>Orientation</i> .....	5
<i>Rigging</i> .....	5
<b>OPERATING INSTRUCTIONS</b> .....	<b>6</b>
<i>Duty Cycle (recommended)</i> .....	6
<b>APPENDIX</b> .....	<b>7</b>
GENERAL MAINTENANCE .....	7
RETURNS PROCEDURE .....	7
CLAIMS .....	7
GENERAL TROUBLESHOOTING .....	8
TECHNICAL SPECIFICATIONS .....	9
TECHNICAL SUPPORT .....	9

# BEFORE YOU BEGIN

## What is included

- 1 x ThunderBall™ (CH-540)
- 5 x JCD130V200W lamps or 5 x JCD230V200W 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.

## 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  $T_a: 40^\circ$ . 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!**

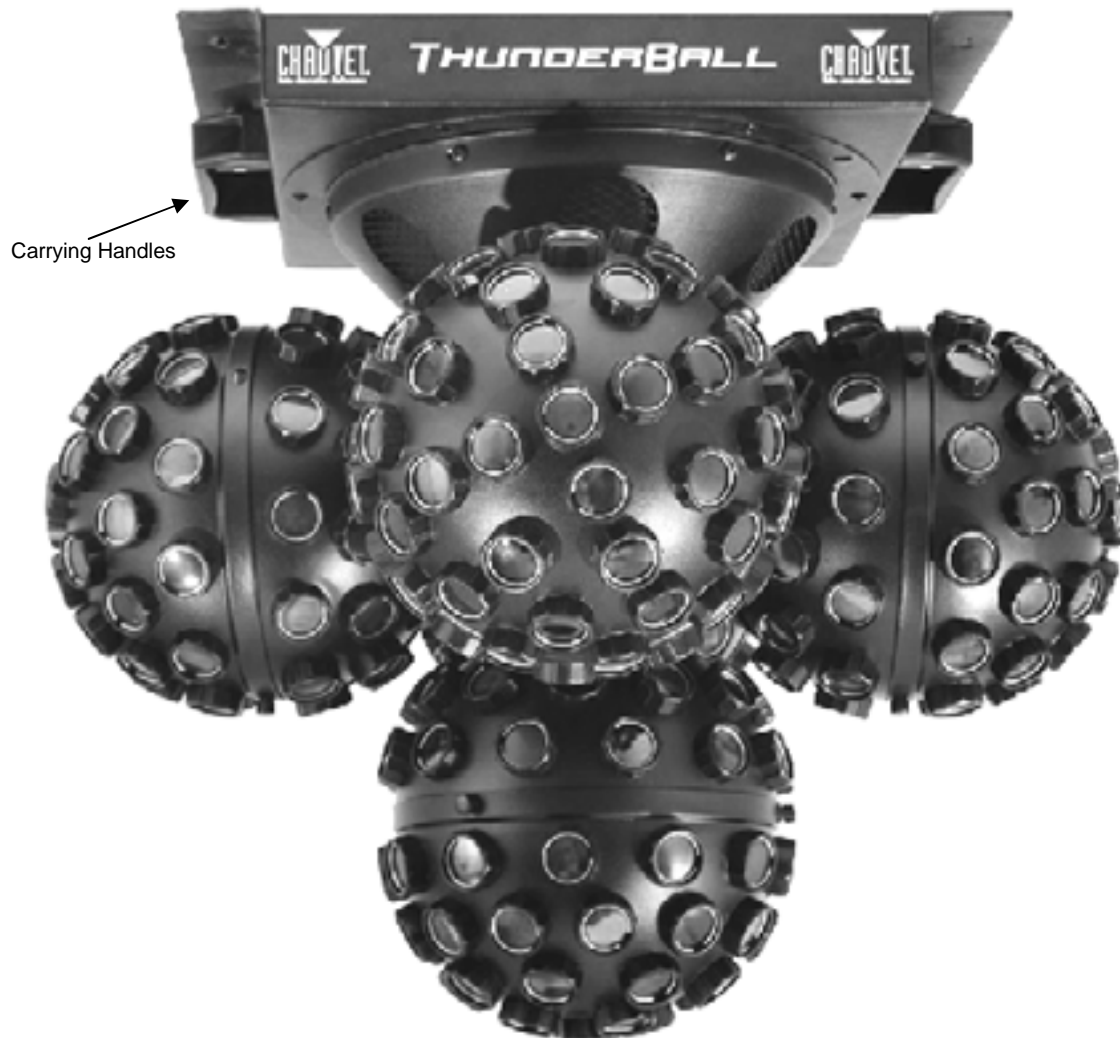
***There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact CHAUVET.***

# INTRODUCTION

## Features

- 5 constantly rotating spheres
- 360° rotation on one axis
- 61 interchangeable lenses per sphere
- Sphere lenses come in Yellow, Green, Blue, Red and Multi-colors

## Product Overview



# SETUP

## Lamp

You may need to install the lamps prior to the initial operation of the fixture. Five JCD 200W 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 (S1) screws located surrounding the midline of the spheres as shown in the image.
- 2) Pull the top cover out exposing the lamp and socket. (not shown)
- 3) If replacing the lamp, remove old lamp first.
- 4) Using a cloth or napkin hold the bulb and pull out of the lamp socket located inside the reflector.
- 5) Replace with a new lamp.
- 6) Replace top cover, align the screw holes and fasten the screws.



## 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



# OPERATING INSTRUCTIONS

The ThunderBall™ is a high output effect light that does not require any type of controller to operate. Five rotating spheres with 61 lenses each produce a spectacular mirror ball like effect that criss-cross continuously. This fixture is designed to operate as a stand-alone unit and to maximize exposure, should be placed in the center of the dance area. Once powered, the spheres will immediately rotate.

Whether used in a mobile or permanent environment, you may find it useful to control this effect by means of a relay system for remote switching or to go with DMX control, use the latest in DMX compatible (Relay Pack), all available from CHAUVET.

A relay system will allow you to remotely trigger the ThunderBall™ and any other non-dimmable effect light from a switch panel. Make sure to use a cable of at least 25 feet to provide ample distance between the control panel and the switch pack for most mobile lighting applications.

If you would prefer to control it directly from your DMX lighting console then we suggest a DMX compatible (relay switch-pack). These devices are an extremely affordable solution to operating non-DMX lighting effects remotely.

## ***Duty Cycle (recommended)***

For optimum fixture longevity, it is recommended that this fixture cycle On and Off every 15 minutes due to the high temperature created while in use. For every 15 minute period that the fixture is used, allow 15 minutes in the Off position to cool down.

To learn more about these and other CHAUVET products visit us at [www.chauvetlighting.com](http://www.chauvetlighting.com).



# APPENDIX

## General 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 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	✓		✓	✓
Fluid indicator not working	The filter tip on the end of the tube inserted into the fluid container must float freely in order to measure correctly, check to see if perhaps it is stuck		✓		
Fogger or Snow output has dropped	Clean with distilled water and vinegar Replace hose		✓		
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	✓			
Motor movements are jerky or jumpy	Possible bad motor driver or sensors Check polarity switch on controller	✓		✓	
Moves slow	Check 220/110v switch for proper setting	✓			
No flash	Re-install bulb, may have shifted in shipping	✓			
No fog	Check fluid tank if empty Make sure green light is on (for power)		✓		
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	✓	✓		
Unit wobbles when rotating	Check for damages possibly incurred during shipping	✓			



## Technical Specifications

### WEIGHT & DIMENSIONS

Length..... 470 mm (18.5 in)  
 Width..... 584 mm (23 in)  
 Height ..... 584 mm (23 in)  
 Weight..... 12.7 Kgs (27.88 lbs)

### POWER

Power..... 115V 60Hz or 230V 50Hz  
 AC input.....3-prong IEC

### DUTY CYCLE (RECOMMENDED)

1. Fixture ON..... (not to exceed) 15 minutes  
 2. Fixture OFF..... (cool down for) 15 minutes

### LAMPS

JCD130V200W x (5) ..... 200W 130V  
 JCD230V200W x (5) ..... 200W 230V

### THERMAL

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

### FUSE

Main .....20mm Glass15A 250V Fast Blow (115V)  
 Main .....20mm Glass 10A 250V Fast Blow (230V)

### ORDERING INFORMATION

ThunderBall™..... CH-540  
 Fuse 15A ..... P170FUSE015  
 Fuse 10A ..... P170FUSE010

## Technical Support

Address: Service Dept.  
 3000 N 29<sup>th</sup> 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>