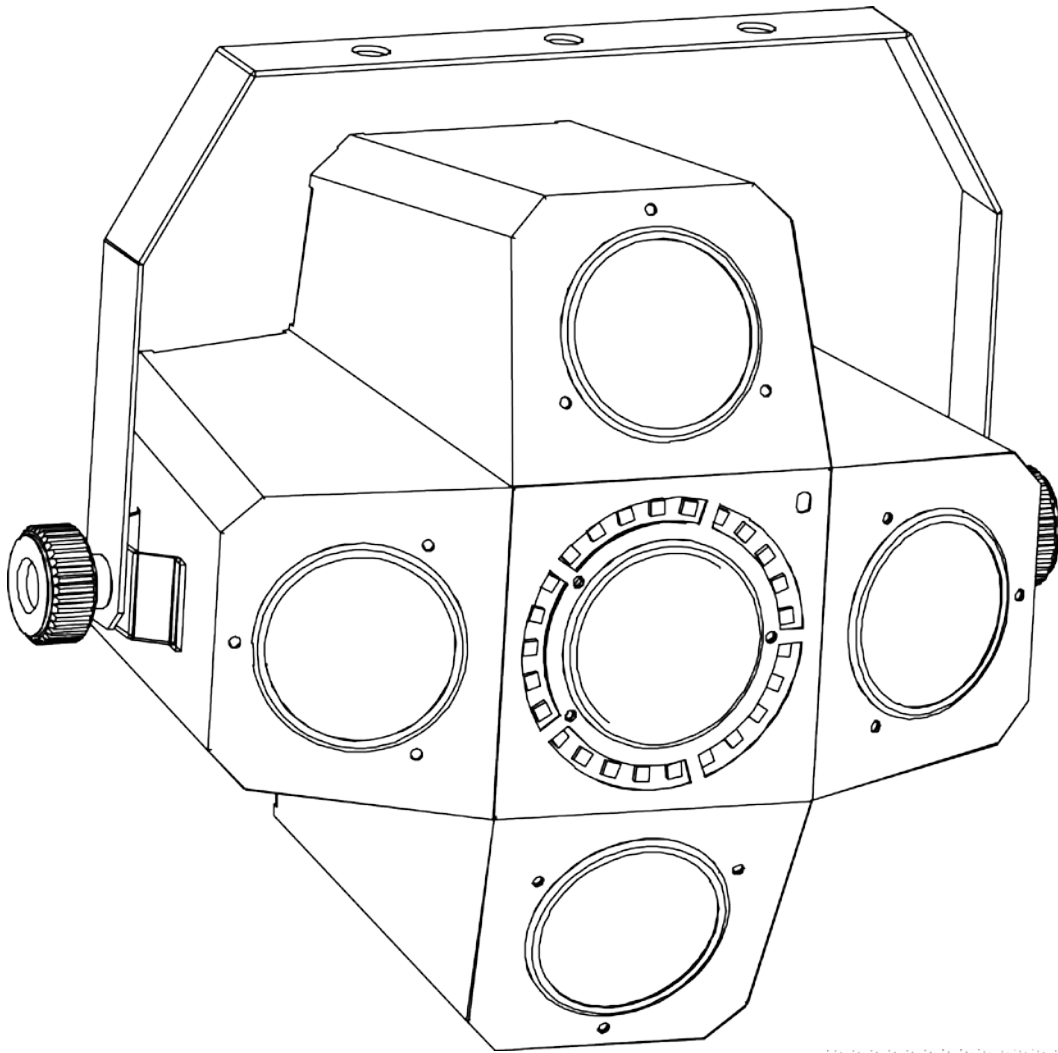


Circus™ 2.0 IRC

User Manual



CHAUVET®
Value • Innovation • Performance
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1. BEFORE YOU BEGIN

What Is Included

- Circus™ 2.0 IRC
- Power Cord
- Hanging Bracket with Mounting Hardware
- Warranty Card
- Quick Reference Guide

Unpacking Instructions

Carefully unpack the product immediately and check the container to make sure all the parts are in the package and are in good condition.

Claims




If the box or the contents (the product and included accessories) appear damaged from shipping, or show signs of mishandling, notify the carrier immediately, not CHAUVET®. Failure to report damage to the carrier immediately may invalidate your claim. In addition, keep the box and contents for inspection.

For other issues, such as missing components or parts, damage not related to shipping, or concealed damage, file a claim with CHAUVET® within 7 days of delivery.

Text Conventions

Convention	Meaning
1–512	A range of values
50/60	A set of values of which only one can be chosen
Settings	A menu option not to be modified
<ENTER>	A key to be pressed on the product's control panel
ON	A value to be entered or selected

Symbols

Symbol	Meaning
	Critical installation, configuration, or operation information. Not following these instructions may make the product not work, cause damage to the product, or cause harm to the operator.
	Important installation or configuration information. The product may not function correctly if this information is not used.
	Useful information.

Disclaimer

The information and specifications contained in this User Manual are subject to change without notice. CHAUVET® assumes no responsibility or liability for any errors or omissions, and reserves the right to revise or recreate this manual at any time. Download the latest version from www.chauvetlighting.com.

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Product at a Glance

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

Safety Notes

These notes include important information about the mounting, usage, and maintenance of this product; read before using the product.



- Always connect the product to a grounded circuit to avoid the risk of electrocution.
- Always disconnect the product from the power source before cleaning or replacing the fuse.
- Avoid direct eye exposure to the light source while the product is on.
- Make sure the power cord is not crimped or damaged.
- Never disconnect the product from power by pulling or tugging on the cord.
- If mounting the product overhead, always secure to a fastening device using a safety cable.
- Make sure there are no flammable materials close to the product when operating.
- Do not touch the product's housing when operating because it may be very hot.



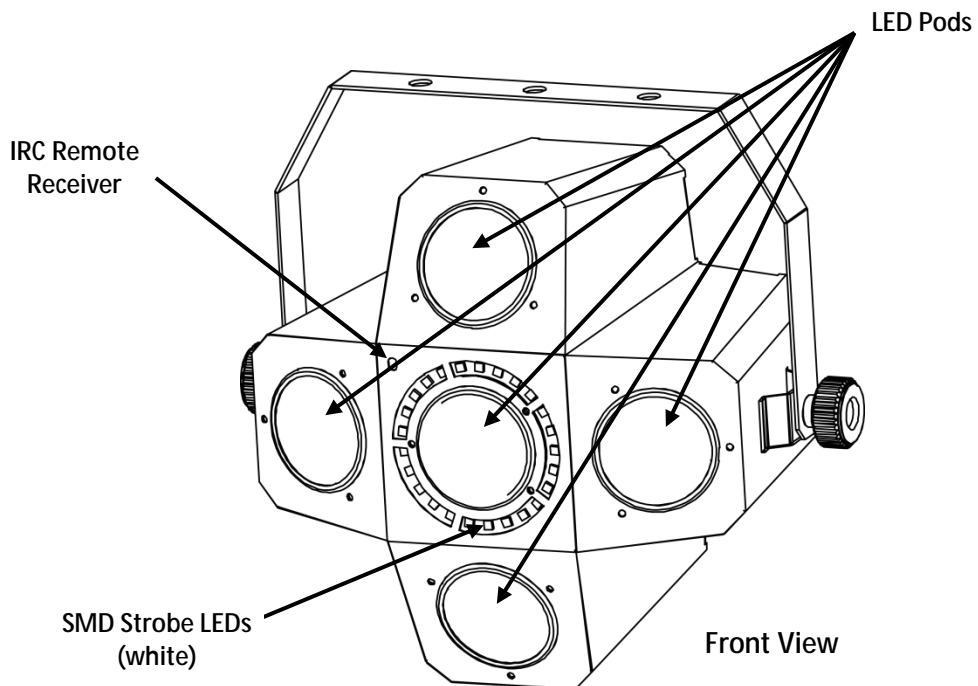
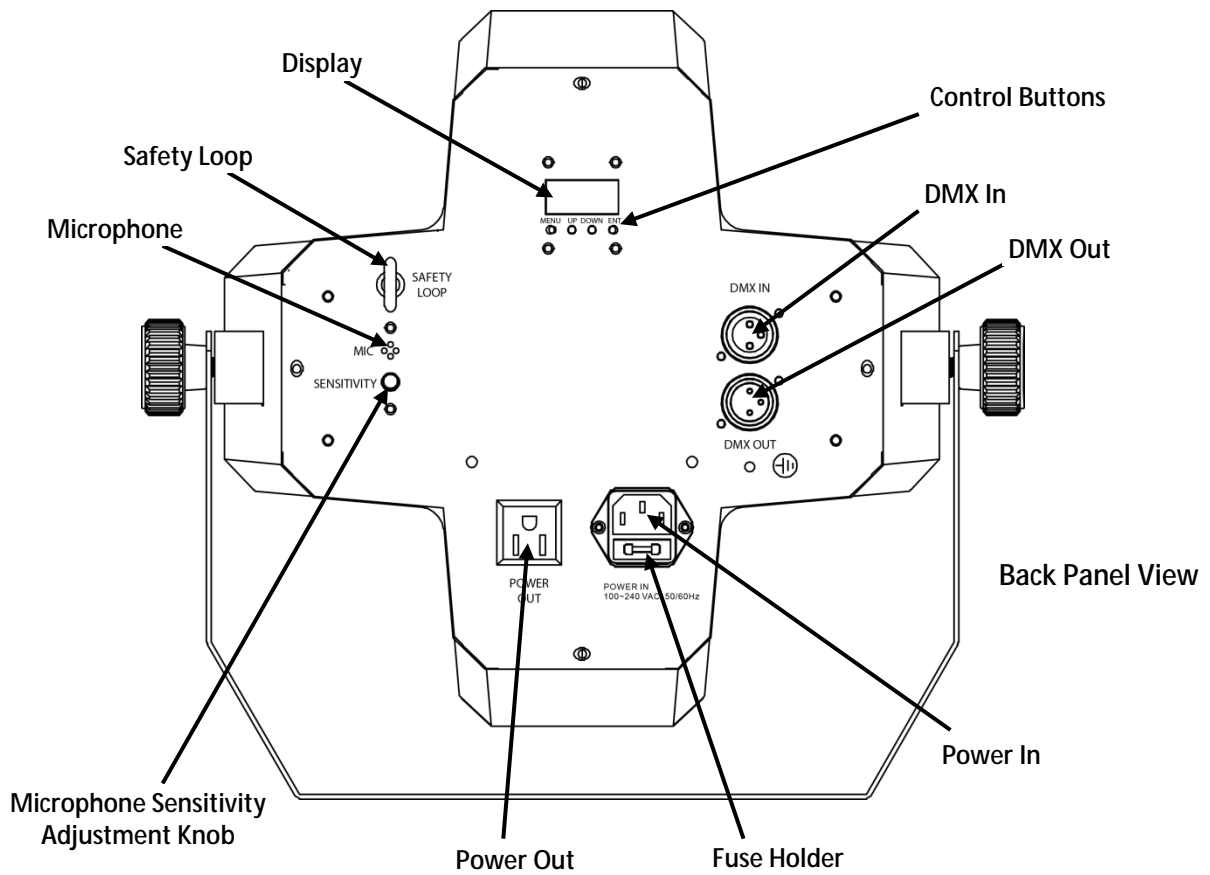
- Always make sure that the voltage of the outlet to which you are connecting the product is within the range stated on the decal or rear panel of the product.
- The product is for indoor use only! (IP20) To prevent risk of fire or shock, do not expose the product to rain or moisture.
- Always install the product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Be sure that no ventilation slots on the product's housing are blocked.
- Never connect the product to a dimmer.
- Make sure to replace the fuse with another of the same type and rating.
- Never carry the product from the power cord or any moving part. Always use the hanging/mounting bracket.
- The maximum ambient temperature (Ta) is 104° F (40° C). Do not operate the product at higher temperatures.
- In the event of a serious operating problem, stop using the product immediately.
- Never try to repair the product. Repairs carried out by unskilled people can lead to damage or malfunction. Contact the nearest authorized technical assistance center.
- This product is not intended for permanent installation.



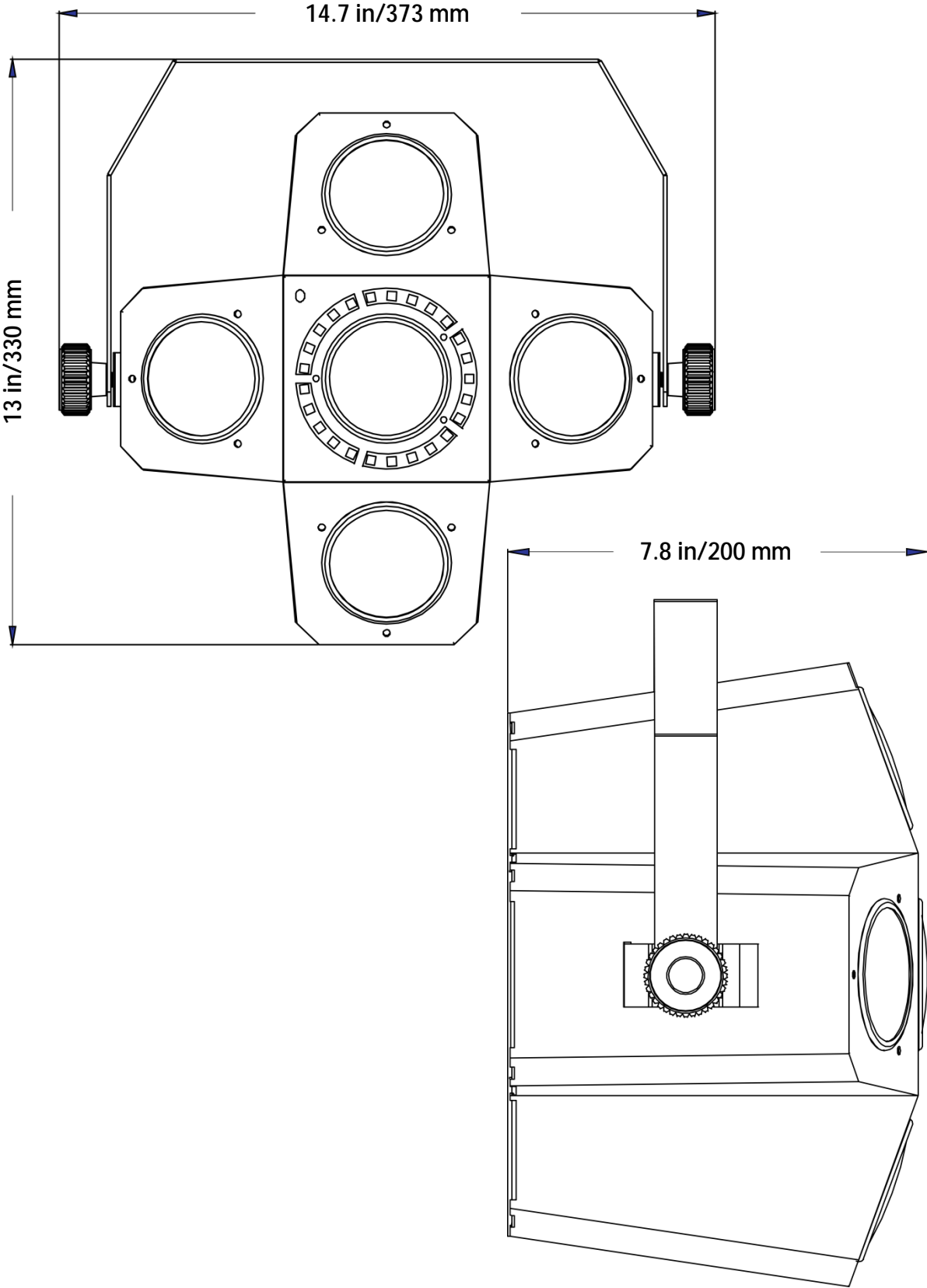
- Keep this User Manual for future use. If you sell the product to another user, be sure to give this document to the next owner.

2. INTRODUCTION

Overview



Dimensions



3. SETUP

AC Power The Circus™ 2.0 IRC 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 product's power requirements (circuit breaker, power outlet, and wiring), use the current value listed on the label affixed to the product's back panel, or refer to the product's specifications chart. The listed current rating indicates the product's average current draw under normal conditions.



Always connect the product to a protected circuit (circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.



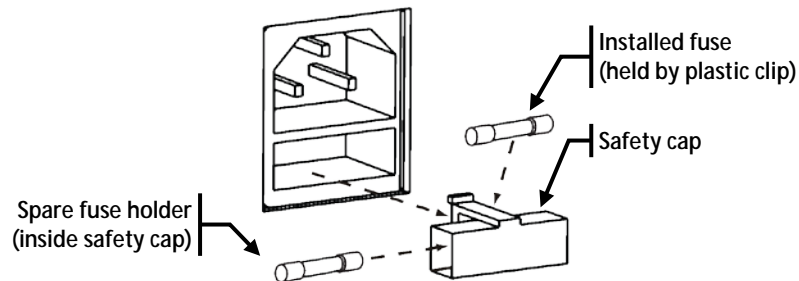
Never connect the product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0–100% switch.

Fuse Replacement



Disconnect the product from power before replacing the fuse.

1. Disconnect the product from power.
2. Wedge the tip of a flat-head screwdriver into the slot of the fuse holder.
3. Pry the fuse holder out of the housing.
4. Remove the blown fuse from the holder.
5. Replace with a fuse of the exact same type and rating.
6. Insert the fuse holder back in place and reconnect power.

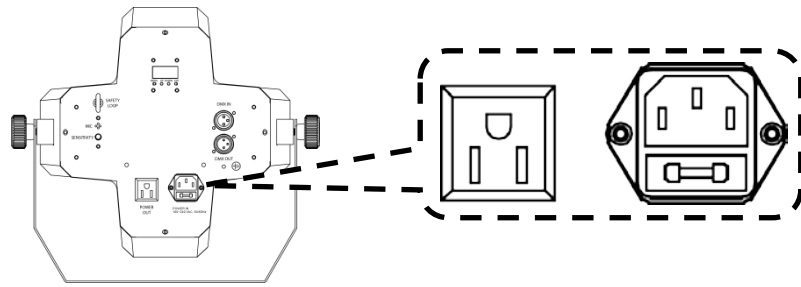


A spare fuse is not included; however, the safety cap has room for a spare.

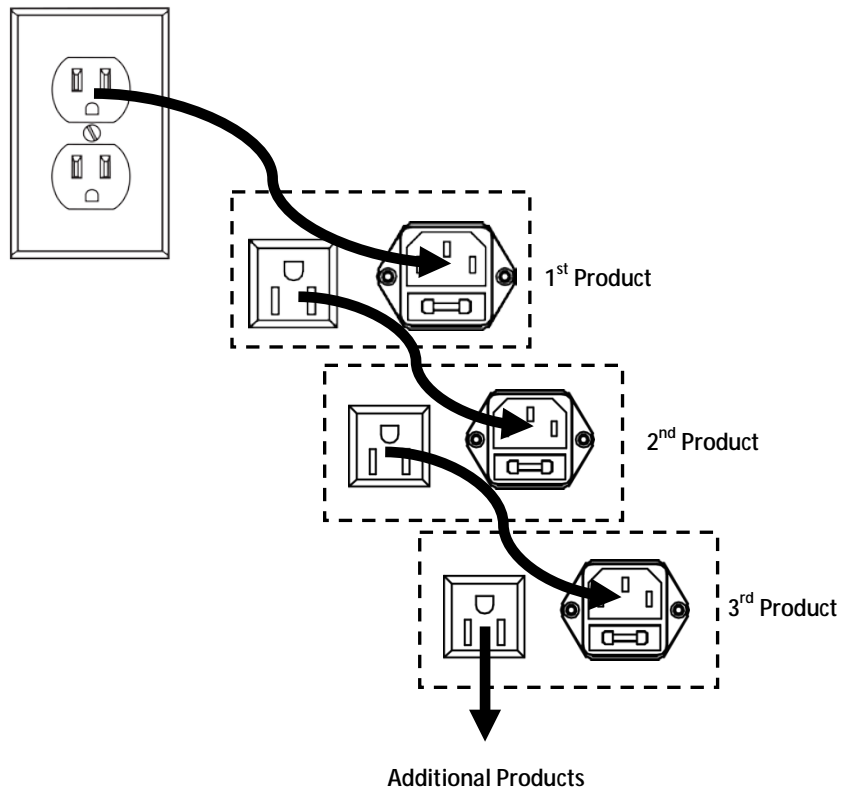


Always replace a blown fuse with another of the same type and rating.

Power Linking The product provides power linking via the Edison outlet located in the back of the unit.



Power Linking Diagram



You can power link up to 42 Circus™ 2.0 IRC units on 120 VAC or up to 78 Circus™ 2.0 IRC units on 230 VAC.



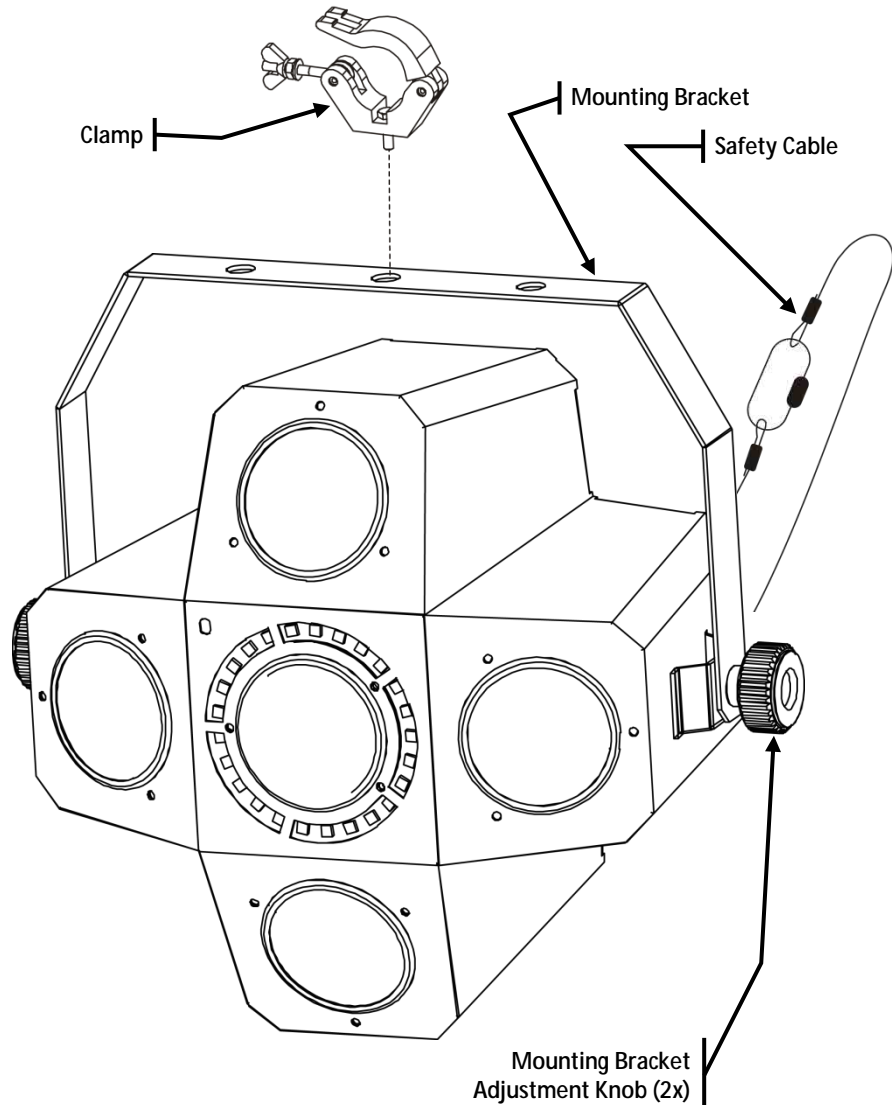
The power linking diagram shown above corresponds to the North American version of the product **ONLY!** If using the product in other markets, you must consult with the local CHAUVET® distributor as power linking connectors and requirements may differ in your country or region.

Mounting Before mounting the product, read and follow the safety recommendations indicated in the Safety Notes.

Orientation The Circus™ 2.0 IRC may be mounted in any position; however, make sure adequate ventilation is provided around the product.

- Rigging**
- Before deciding on a location, always make sure there is easy access to the product for maintenance and programming.
 - Make sure that the structure or surface onto which you are mounting the product can support the product's weight (see the [Technical Specifications](#)).
 - When mounting the product overhead, always use a safety cable. Mount the product securely to a rigging point, such as an elevated platform or a truss.
 - When rigging the product onto a truss, you should use a mounting clamp of appropriate weight capacity.
 - When power linking multiple products, you must always consider the length of the power linking cable and mount the products close enough for the cable to reach.
 - The bracket adjustment knobs allow for directional adjustment when aiming the product to the desired angle. Only loosen or tighten the bracket knobs manually. Using tools could damage the knobs.

Mounting Diagram



4. OPERATION

Control Panel Operation

To access the control panel functions, use the four buttons located underneath the display.

Button	Function
<MENU>	Selects an operation mode or to backs out of the current menu option
<UP>	Scrolls up the list of options or selects a higher value
<DOWN>	Scrolls down the list of options or selects a lower value
<ENT>	Activates a menu option or a selected value

Menu Map

Mode	Programming Steps		Description
DMX Address	4-CH	d 1–d512	Selects the DMX starting address
Standalone Sound	SNd		Sound-Active standalone mode
Sound/Speed	S--	S 1–S100	Sound sensitivity in Sound-Active mode Speed in automatic programs
Standalone Auto-Configure	AUTO		Standalone automatic programs
Infrared (IRC Mode)	SEr	oN	Turns infrared for remote control on or off
		oFF	

Configuration (DMX)

Set the product in DMX mode to control with a DMX controller.

1. Connect the product to a suitable power outlet.
2. Turn the product on.
3. Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket on the 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 product's channels.

The Circus™ 2.0 IRC uses up to 4 DMX channels in its 4-channel DMX mode, which defines the highest configurable address to **509**.

If unfamiliar with DMX or DIP switches, download the DMX Primer from www.chauvetlighting.com.

To select the starting address, do the following:

1. Press <MENU> repeatedly until **4-CH** shows on the display.
2. Press <ENT>.
3. Use <UP> or <DOWN> to select the starting address.
4. Press <ENT>.

DMX Channel Modes, Assignments, and Values

4-Channel	Channel	Function	Value	Setting
	1	Program/Mode	000 ó 015	No function
			016 ó 021	Automatic 1
			022 ó 027	Automatic 2
			028 ó 033	Automatic 3
			034 ó 039	Automatic 4
			040 ó 045	Automatic 5
			046 ó 051	Automatic 6
			052 ó 057	Automatic 7
			058 ó 063	Automatic 8
			064 ó 069	Automatic 9
			070 ó 075	Automatic 10
			076 ó 081	Automatic 11
			082 ó 087	Automatic 12
			088 ó 093	Automatic 13
			094 ó 099	Automatic 14
			100 ó 105	Automatic 15
			106 ó 111	Automatic 16
			112 ó 117	Automatic 17
			118 ó 123	Automatic 18
			124 ó 129	Automatic 19
			130 ó 135	Automatic 20
			136 ó 141	Automatic 21
			142 ó 147	Automatic 22
			148 ó 153	Automatic 23
			154 ó 159	Automatic 24
			160 ó 165	Automatic 25
			166 ó 171	Automatic 26
			172 ó 177	Automatic 27
			178 ó 183	Automatic 28
			184 ó 189	Automatic 29
			190 ó 195	Automatic 30
			196 ó 201	Automatic 31
			202 ó 207	Automatic 32
			208 ó 213	Automatic 33
			214 ó 219	Automatic 34
			220 ó 225	Automatic 35
			226 ó 231	Automatic 36
	232 ó 237	Automatic 37		
	238 ó 255	Sound-Active mode		
	2	Speed	000 ó 255	Automatic program speed (slow to fast)
	3	Pods Strobe Speed	000 ó 015	No function
			016 ó 255	Pods automatic strobe speed (slow to fast)
	4	SMD Strobe Speed	000 ó 015	No function
			016 ó 255	SMD strobe speed (slow to fast) When Channel 1 is 000–237

Configuration (Standalone)

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

1. Connect the product to a suitable power outlet.
2. Turn the product on.



Never connect a product that is operating in any standalone mode (either Static, Automatic, or Sound) to a DMX string connected to a DMX controller. Products in standalone mode may transmit DMX signals that could interfere with the DMX signals from the controller.

Sound-Active Mode

To enable the Sound-Active mode and select sound sensitivity, do the following:

1. Press <MENU> repeatedly until **Snd** shows on the display.
2. Press <ENT> to activate the Sound-Active mode.
3. Press <MENU> until **S--** shows on the display.
4. Use <UP> or <DOWN> to select the sound sensitivity from **S 1** to **S100** (low to high).
5. Press <ENT>.



Note: You can also set the microphone sensitivity in Sound-Active mode using the microphone sensitivity knob. Turn the music on and adjust the microphone sensitivity knob until the product starts responding to the beat of the music.



The product will only respond to low frequencies of music (bass and drums).

Automatic Mode

To enable the Automatic mode and select the automatic program speed, follow the instructions below:

1. Press <MENU> repeatedly until **AUTO** shows on the display.
2. Press <ENT> to activate the automatic programs.
3. Press <MENU> until **S--** shows on the display.
4. Use <UP> or <DOWN> to select the automatic program speed from **S 1** to **S100** (fast to slow).
5. Press <ENT>.

Master/Slave Mode

The Master/Slave mode allows a single Circus™ 2.0 IRC unit (the “master”) to control the actions of one or more Circus™ 2.0 IRC 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 from DMX starting address **d 1**. 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 the **DMX address** to **d 1**.
2. Connect the DMX input of the first slave unit to the DMX output of the master unit.
3. Connect the DMX input of the subsequent slave units to the DMX output of the previous slave unit.
4. Finish setting and connecting all the slave units.

Master unit:

1. Set the master unit to operate in either Sound-Active or Automatic mode.
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 the controller may interfere with the signals from the master unit.**
- **Do not connect more than 31 slave units to the master unit.**

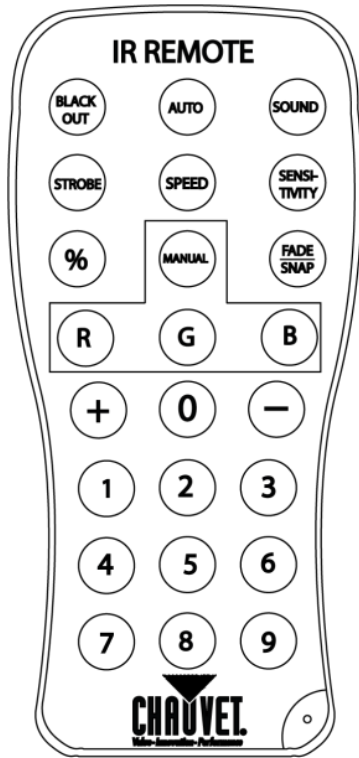
Infrared Remote Control (IRC)

The Circus™ 2.0 IRC is fully compatible with the Infrared Remote Control (IRC) from CHAUVET®. To enable usage with the IRC, do the following:

1. Press **<MENU>** repeatedly until **SEr** shows on the display.
2. Press **<ENT>** to accept.
3. Press **<UP>** or **<DOWN>** to select **oN** or **oFF**.
4. Press **<ENT>**.

IRC Operation

Note: Make sure to point the IRC directly at the receiver on the product.



Automatic Mode

Automatic mode will enable you to run the automatic programs on the product.

To turn on Automatic mode:

1. Press **<AUTO>** on the IRC.
2. Press **<+>** or **<->** to choose between any different auto programs.

To adjust the speed of the automatic program:

1. Press **<SPEED>** on the IRC.
2. Press **<%>**.
3. Press **<+>** or **<->** to either increase or decrease the speed of the program.

Sound-Active Mode

Sound-Active mode will enable the product to respond to the music.

To turn on Sound Active mode:

1. Press **<SOUND>** on the IRC.

To adjust sound sensitivity in Sound-Active mode:

1. Press **<SENSITIVITY>** on the IRC.
2. Press **<%>**.
3. Press **<+>** or **<->** to either increase or decrease sound sensitivity.

Miscellaneous Operation

To adjust the strobe rate of the program:

1. Press **<STROBE>** on the IRC.
2. Press **<+>** or **<->** to increase or decrease the strobe rate.
3. Press **<STROBE>** again to turn off the strobe.

To change the switching effect of the program:

1. Press **<FADE/SNAP>** on the IRC.

Fade will slowly switch the effect. Snap will rapidly switch the effect.

To black out the lights:

1. Press **<BLACK OUT>** on the IRC.

This will turn off all the lights until the button is pressed again.

Note: The IRC will not respond to any inputs when Black Out is activated. If the remote does not respond when a button is pressed, try pressing **<BLACK OUT>**. You may have inadvertently activated Black Out.

5. TECHNICAL INFORMATION

Product Maintenance

Dust build-up reduces light output performance and can cause overheating. This can lead to reduction of the light source's life. To maintain optimum performance and minimize wear, clean the product at least twice a month. However, usage and environmental conditions contribute to increased cleaning frequency.

To clean the product, follow the instructions below:

- Unplug the product from power.
- Wait until the product is at room temperature.
- Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on external surfaces.
- Clean all external optics and transparent 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 wipe any dirt or grime to the outside edges of the external optics or transparent surface.
- Gently polish the external optics and transparent surfaces until they are free of haze and lint.



Always dry the external optics and transparent surfaces carefully after cleaning them.

6. TECHNICAL SPECIFICATIONS

Dimensions and Weight	Length	Width	Height	Weight
	14.7 in (373 mm)	7.8 in (200 mm)	13 in (330 mm)	8.5 lbs (3.8 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	23 W	25 W
Operating current	0.2 A	0.1 A
Power linking current (units)	8 A (42 units)	8 A (78 units)
Fuse	T 1 A, 250 V	T 1 A, 250 V

Power I/O	U.S./Worldwide	UK/Europe
Power input connector	IEC	IEC
Power output connector	Edison	IEC
Power cord plug	Edison (U.S.)	Local plug

Light Source (LED Pods)	Type	Power	Lifespan
	LED	0.25 W	100,000 hours

Color	Quantity	Current
Red	80	20 mA
Green	80	20 mA
Blue	80	20 mA
White	40	20 mA
Amber	40	20 mA

Light Source (SMD Strobe LEDs)	Type	Power	Lifespan
	SMD LED	60 mA	50,000 hours

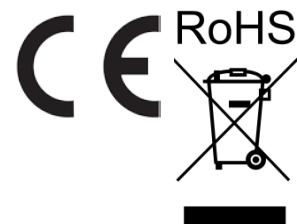
Color	Quantity	Current
White	25	60 mA

Photo Optic	Parameter	
	Coverage angle	55°
Strobe Rate	0~30 Hz	

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

DMX	I/O Connectors	Connector Type	Channel Range
	3-pin XLR	Sockets	4

Ordering	Product Name	Item Code	UPC Number
	Circus™ 2.0 IRC	03050649	781462209971



To return a product or request support:

- In the U.S., contact CHAUVET® World Headquarters.
- In the UK or Ireland, contact CHAUVET® Europe Ltd.
- In any other country, DO NOT contact CHAUVET®. Contact your distributor. See www.chauvetlighting.com for distributors outside the U.S., United Kingdom, or Ireland.



If you live outside the U.S., United Kingdom, or Ireland, contact your distributor of record and follow their instructions on how to return CHAUVET® products to them. Visit our website for contact details.

Returns

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

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

Clearly label the package with the RMA number. CHAUVET® will refuse any product returned without an RMA number.



Write the RMA number on a properly affixed label. DO NOT write the RMA number directly on the box.

Before sending the product, clearly write the following information on a piece of paper and place it inside the box:

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

Be sure to pack the product properly. Any shipping damage resulting from inadequate packaging will be your responsibility. FedEx packing or double-boxing are recommended.



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

Contact Us

World Headquarters

CHAUVET®

General Information

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Sunrise, FL 33351
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World Wide Web

www.chauvetlighting.com

United Kingdom & Ireland

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