ROTOSPHERE HP

User Manual







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1. Before You Begin

What Is Included

- · Rotosphere HP
- Power cable

- · Hanging bracket with mounting hardware
- · 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 a 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	menu option not to be modified	
<enter></enter>	key to be pressed on the product's control panel	
ON	A value to be entered or selected	

Symbols

Symbol	Meaning
A	Electrical warning. Not following these instructions may cause electrical damage to the product, accessories, or the user.
Ţ	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

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Intellectual Property

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Safety Notes

ALWAYS:

- Connect to a grounded circuit.
- ♦ Connect to operating voltages as specified on the product's spec sticker.



- Disconnect from power before replacing the fuse.
- Disconnect from its power source during periods of inactivity.
- Use a safety cable when suspending overhead.
- Heed all restrictions and warnings on the spec sticker.
- ♦ Mount in a location with at least 20 in (50 cm) of ventilation.
- Replace the fuse with the same type and rating.
- In the event of a serious operating problem, stop using immediately.

DO NOT:

- Open this product or attempt any repairs. It contains no user-serviceable parts.
- Look at the light source when the product is on.
- Use if the power cord is crimped or damaged.
- Disconnect by pulling on the power cord.
- Allow flammable materials close to the product when it is operating.
- ♦ Touch the housing when it is on.
- ♦ Block any ventilation holes/slots in the housing.
- ♦ Connect to a dimmer or rheostat.
- ♦ Carry the product by its power cord.
- ♦ Operate in temperatures higher than 104°F (40°C).
- ♦ Expose to environments that exceed the Ingress Protection (IP) rating.
- ♦ Expose to rain or moisture.
- ♦ Use outdoors.
- Expose to corrosive environmental conditions such as temperature, humidity, salinity, pressure, radiation, or shock.
- Set this product on a flammable surface.

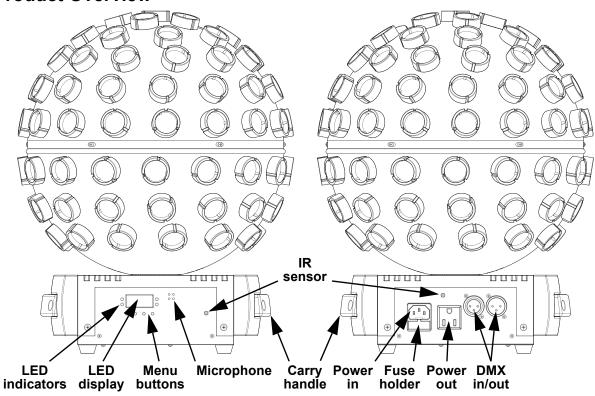


Keep this User Manual for future use. If the product is sold to someone else, be sure that they also receive this document.

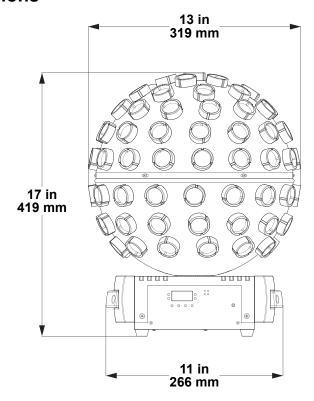


2. Introduction

Product Overview



Product Dimensions





3. Setup

AC Power

The Rotosphere HP has an auto-ranging power supply and it can work with an input voltage range of 100 to 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.



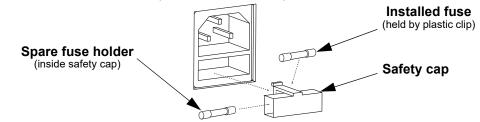
- Always connect the product to a protected circuit (a circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.



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

Fuse Replacement

- 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 and replace with a fuse of the exact same type and rating.
- 5. Insert the fuse holder back in place and reconnect power.





Disconnect the product from the power outlet before replacing the fuse.

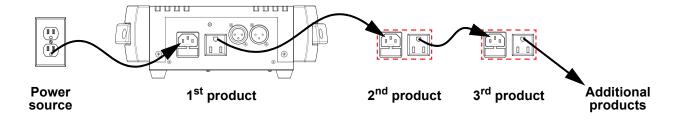


Always replace a blown fuse with one of the same type and rating.

Power Linking

This product provides power linking via the outlet located in the back of the product. See the diagram below for further explanation.

Power Linking Diagram





It is possible to link up to 8 Rotosphere HP products on 120 VAC or up to 13 products 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, consult with the local Chauvet distributor as power linking connectors and requirements may differ by country or region.



Mounting

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

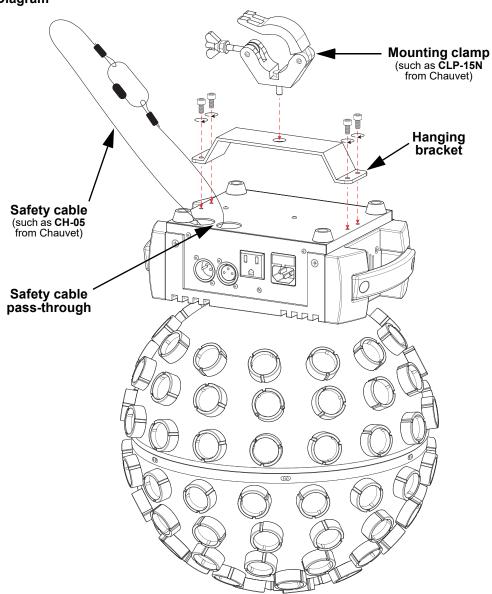
Orientation

The Rotosphere HP may be mounted in any position; however, make sure adequate ventilation is provided around the product.

Rigging

- Before deciding on a location for the product, always make sure there is easy access to the product for maintenance and programming.
- Make sure that the structure and attachment points can support the weight before hanging the product (see the <u>Technical Specifications</u>)
- 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, use a mounting clamp of appropriate weight capacity. The bracket has a 13-mm hole, which is appropriate for this purpose.
- 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. Please refer to the Product Overview to see the button locations on the control panel.

Button	Function	
<menu></menu>	Press to find an operation mode or to back out of the current menu option	
<up></up>	Press to scroll up the list of options or to find a higher value	
<down></down>	Press to scroll down the list of options or to find a lower value	
<enter></enter>	Press to activate a menu option or a selected value	

Menu Map

Refer to the Rotosphere HP product page on www.chauvetdj.com for the latest menu map.

Mode	Pro	rogramming Levels		Description
	3Ch	A001–512		3-channel DMX mode
DMX Mode	12Ch			12-channel DMX mode
	28Ch			28-channel DMX mode
Programs	P	P ·	1–5	Automatic programs
Auto Speed	S	S001	-100	Program speed for P 1–5
Motor	Mot	M000) –100	Motor speed for programs and static colors
Static Colors	C	C001	-015	Static colors
		b	0	Sound-active program, blackout without sound
Sound Mode	Snd	SL	oU	Sound-active program, slow down without sound
Sensitivity	SEnS	u001	-100	Sets sound sensitivity
		r000-255 G000-255 b000-255 U000-255 C000-255		Custom static colors
				Combine red, green, blue, white, cyan, magenta, yellow, and orange
Custom	U	M000-255		
Color Mixing	0	y000–255		
		0000	–255	
		S000	–100	Strobe rate
		DI	DI-L	Rotate left
		DI	DI-R	Rotate right
		M000-100		Motor speed
Infrared	8 E4	0	n	Turns infrared on or off
Mode	SEI	SEt oFF		Turns illinared on or on



Configuration (DMX)

The Rotosphere HP works with a DMX controller. Information about DMX is in the CHAUVET DMX Primer, which is available from the Chauvet website chauvetlighting.com/downloads/DMX Primer rev05 WO.pdf.

Personality and Starting Address

The Rotosphere HP uses up to 28 DMX channels in the **28Ch** DMX mode, which defines the highest recommended address to **485**.

When selecting a starting DMX address, always consider the number of DMX channels the DMX mode uses. If the starting address is set too high, access to some channels could be restricted.

For information about the DMX protocol, download the DMX Primer from www.chauvetdj.com.

To select the personality and starting address, do the following:

- 1. Press <MENU> repeatedly until 3Ch, 12Ch, or 28Ch shows on the display.
- 2. Press <ENTER>.
- 3. Use **<UP>** or **<DOWN>** to select the starting address, from **A001–512**.
- 4. Press <ENTER>.

DMX Channel Assignments and Values

3Ch	12Ch	28Ch	Function	Value	Percent/Setting			
				000	No function			
1	1 1 -	1	-	_	-	Program	001 ⇔ 250	Automatic program
				251 ⇔ 255	Sound-active program			
2	2	_	Program speed (when Ch. 1 is 001⇔ 250)	000 ⇔ 255	Automatic program speed, slow to fast			
	_	_	Sound sensitivity (when Ch. 1 is 251⇔ 255)		Sound sensitivity, low to high			
	3	1	Red 1	000 ⇔ 255	0–100%			
	4	2	Green 1	000 ⇔ 255	0–100%			
_	5	3	Blue 1	000 ⇔ 255				
	6	4	White 1	000 ⇔ 255				
_	7	5	Cyan 1	000 ⇔ 255				
	8	6	Magenta 1	000 ⇔ 255	_			
_	9	7	Yellow 1	000 ⇔ 255				
	10	8	Orange 1	000 ⇔ 255				
_	-	9	Red 2	000 ⇔ 255				
_	-	10	Green 2	000 ⇔ 255	_			
_	-	11	Blue 2	000 ⇔ 255	0–100%			
_	-	12	White 2	000 ⇔ 255				
_	-	13	Cyan 2	000 ⇔ 255	_			
_	-	14	Magenta 2	000 ⇔ 255				
	-	15	Yellow 2	000 ⇔ 255				
_	-	16	Orange 2	000 ⇔ 255	_			
	-	17	Red 3	000 ⇔ 255				
_	-	18	Green 3	000 ⇔ 255				
_	-	19	Blue 3	000 ⇔ 255				
_	-	20	White 3	000 ⇔ 255				
	-	21	Cyan 3	000 ⇔ 255	0–100%			
	-	22	Magenta 3	000 ⇔ 255				
	-	23	Yellow 3	000 ⇔ 255				
	-	24	Orange 3	000 ⇔ 255				
-	11	25	Strobe		No function Strobe, slow to fast			



3Ch	12Ch	28Ch	Function	Value	Percent/Setting
				000	No function
-	_	26	Program	001 ⇔ 250	Automatic program
				251 ⇔ 25	Sound-active program
			Program speed (when Ch. 26 is 001⇔ 250)	000 ⇔ 25	Automatic program speed, slow to fast
-	27	Sound sensitivity	Sound concitivity	Sound sensitivity	Sound sensitivity, low to high
				000 🖨 127	Motor indexing
2	3 12 28	42 20 Motor rotation	Motor rotation	128 🖨 189	Motor rotation, fast to slow
3		20	MOLOI TOLALIOIT	190 🖨 193	Stop
				194 ⇔ 25	Reverse motor rotation, slow to fast

Configuration (Standalone)

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



Never connect a product that is operating in any standalone mode 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.

Automatic Programs

To run the Rotosphere HP with an automatic program, follow the instructions below.

- 1. Press <MENU> repeatedly until P-- shows on the display.
- 2. Press **<ENTER>**.
- 3. Use **<UP>** or **<DOWN>** to select the desired program from **P 1–5**.
- 4. Press <ENTER>.

Automatic Program Speed

To set the speed of the automatic program, do the following:

- 1. Press **<MENU>** repeatedly until **S--** shows on the display.
- 2. Press <ENTER>.
- 3. Use **<UP>** or **<DOWN>** to increase or decrease the program speed, from **S001–100**.
- 4. Press <ENTER>.

Motor Rotation Speed

To set the motor rotation speed for programs and static colors, follow the instructions below:

- 1. Press **<MENU>** repeatedly until **Mot** shows on the display.
- 2. Press <ENTER>.
- 3. Use **<UP>** or **<DOWN>** to increase or decrease the rotation speed, from **M000–100**.
- 4. Press **<ENTER>**.

Preset Static Colors

To run the Rotosphere HP with a preset static color, do the following:

- 1. Press <MENU> repeatedly until C-- shows on the display.
- 2. Press <ENTER>.
- Use **<UP>** or **<DOWN>** to select the desired color from **C001–015**.
- 4. Press <ENTER>.

Sound-Active Mode

To run the Rotosphere HP with a sound-active program, follow the instructions below.

- 1. Press <MENU> repeatedly until Snd shows on the display.
- Press <ENTER>.
- 3. Press **<ENTER>** to select how the product will respond when no sound is detected, from **bo** (blackout), or **SLoU** (slow down).
- 4. Press **<ENTER>**.



Sound Sensitivity

To set the sound sensitivity of the product, do the following:

- 1. Press <MENU> repeatedly until SEnS shows on the display.
- 2. Press <ENTER>.
- 3. Use **<UP>** or **<DOWN>** to increase or decrease the sound sensitivity, from **u001–100**.
- 4. Press **<ENTER>**.



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

Custom Color Mixing

To run the Rotosphere HP with a custom static color, follow the instructions below.

- 1. Press <MENU> repeatedly until U-- shows on the display.
- 2. Press <ENTER>.
- 3. Press **<ENTER>** to cycle through the options, \mathbf{r} __ (red), \mathbf{G} __ (green), \mathbf{b} __ (blue), \mathbf{U} __ (white), \mathbf{C} __ (cyan), \mathbf{M} __ (magenta), \mathbf{y} __ (yellow), \mathbf{o} __ (orange), \mathbf{S} __ (strobe speed), \mathbf{DI} -_ (rotation direction), and \mathbf{M} __ (motor speed).
- 4. Use **<UP>** or **<DOWN>** to increase or decrease the selected value from **_000–255**, or to select the rotation direction from **DI-L** (left) or **DI-R** (right).
- 5. Repeat steps 3-4 until the product output is set as desired.

IRC-6 Infrared Remote Control

The Rotosphere HP is compatible with the IRC-6 infrared remote control from Chauvet.

To enable or disable IRC-6 functionality, do the following:

- 1. Press **<MENU>** repeatedly until **SEt** shows on the display.
- 2. Press <ENTER>.
- 3. Press **<ENTER>** to select from **on** (enable), or **oFF** (disable).
- 4. Press **<ENTER>**.

Consult the table below to operate the Rotosphere HP with the IRC-6.

IRC-6	Button	Function
	<auto></auto>	Press to activate automatic mode, then use <+> or <-> to increase or decrease speed
	<sound></sound>	Press to activate sound-active mode, then use <+> or <-> to increase or decrease sensitivity
BLACK AUTO SOUND	<strobe></strobe>	Press to toggle strobe, then use <+> or <-> to increase or decrease strobe speed
	<%>	Press then use <+> or <-> to increase or decrease the dimmer
STROBE SPEED SENSI-	<+>	Press to increase speed, sensitivity, or the dimmer
% MANUAL FADE	<->	Press to decrease speed, sensitivity, or the dimmer
R G B	<0>	Sets colors to red, green, blue, white, cyan, magenta, yellow, and orange
A W W	<1>	Sets color to red
(+) (0) (-)	<2>	Sets color to orange
$\begin{array}{c cccc} & & & & & & \\ \hline & 1 & & 2 & & 3 \end{array}$	<3>	Sets color to yellow
4 5 6	<4>	Sets color to green
	<5>	Sets color to cyan
7 8 9	<6>	Sets color to blue
	<7>	Sets color to magenta
19	<black out=""></black>	Press to turn off all the lights until the button is pressed again. NOTE: The IRC-6 will not respond to any inputs when Black Out is activated. If the product does not respond when a button is pressed, try pressing <black out=""></black> . Black Out may have been activated.



Master/Slave Mode

The Master/Slave mode allows a single Rotosphere HP product (the "master") to control the actions of one or more Rotosphere HP products (the "slaves") without the need of a DMX controller. The master product will be set to operate in either standalone mode or with the IRC-6, while the slave products will be set to operate in slave mode. Once set and connected, the slave products will operate in unison with the master product.

Configure the products as indicated below.

Slave products:

- 1. Press <MENU> repeatedly until 3Ch shows on the display.
- 2. Press <ENTER>.
- Use **<UP>** or **<DOWN>** to set the starting address to **A001**.
- Press <ENTER>.
- 5. Connect the DMX input of the first slave product to the DMX output of the master product.
- Connect the DMX input of the subsequent slave products to the DMX output of the previous slave product.
- 7. Finish setting and connecting all the slave products.

Master product:

- 1. Set the master product to operate in standalone mode or with the IRC-6.
- 2. Make the master product the first product in the DMX daisy chain.



- Configure all the slave products before connecting the master to the 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.
- Do not connect more than 31 slaves to the master.



5. Maintenance

Product 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, clean all lighting products at least twice a month. However, be aware that usage and environmental conditions could be contributing factors to increase the cleaning frequency.

To clean the product, follow the instructions below:

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



Always dry the transparent surfaces carefully after cleaning them.



6. Technical Specifications

Color

RGBW

CMYO

Dimensions and Weight

Length	Width	Height	Weight
11 in (266 mm)	13 in (319 mm)	17 in (419 mm)	9 lb (4.0 kg)

Note: Dimensions in inches are rounded.

Power

Power Supply Type	Range	Voltage Selection
Switching (internal)	100 to 240 VAC, 50/60 Hz	Auto-ranging
Parameter	120 V, 60 Hz	230 V, 50 Hz
Consumption	75 W	73 W
Operating Current	0.9 A	0.6 A
Power linking current (products)	8 A (8 products)	8 A (13 products)
Fuse	T 2 A, 250 V	T 2 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		

Photometrics

Type

LED

Strobe Rate	Coverage Angle	Rotation Speed
0 to 20 Hz	360°	2 to 19 rpm

Power

7 W

Quantity

5

5

Thermal

Maximum External Te	emperature Cooling System	ı
104 °F (40 °C	C) Convection	
DMX		
I/O Connect	or Channel Range	
3-pin XLR	3, 12, or 28	
Ordering		
Product Nan	ne Item Code	UPC Number
Rotosphere H	HP 07052005	781462223533



Lifespan

50,000 hours

Current

3 A



Contact Us

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sty 9 Deturne	

Warranty & Returns

For warranty terms and conditions and return information, please visit our website.

For customers in the United States and Mexico: www.chauvetlighting.com/warranty-registration.

For customers in the United Kingdom, Republic of Ireland, Belgium, the Netherlands, Luxembourg, France, and Germany: www.chauvetlighting.eu/warranty-registration.