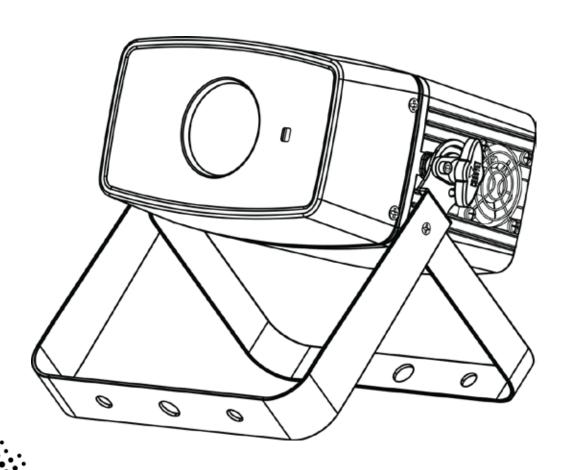


**User Manual** 





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## 1. Before You Begin

What Is · Included

Abyss USB

Power Cord Warranty Card Mounting Bracket with Mounting

Hardware

Quick Reference Guide

# **Instructions**

Unpacking 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			
Menu > Settings	A sequence of menu options to be followed		
<b><enter></enter></b> A key to be pressed on the product's control panel			
ON A value to be entered or selected			

### **Symbols**

Symbol	Meaning
4	Electrical warning. Not following these instructions may cause electrical damage to the product, accessories, or the user.
$\hat{\mathbb{A}}$	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.
$\mathbf{i}$	Important installation or configuration information. The product may not function correctly if this information is not used.
	Useful information.

**Disclaimer** Chauvet believes that the information contained in this manual is accurate in all respects. However, Chauvet assumes no responsibility and specifically disclaims any and all liability to any party for any loss, damage or disruption caused by any errors or omissions in this document, whether such errors or omissions result from negligence, accident or any other cause. Chauvet reserves the right to revise the content of this document without any obligation to notify any person or company of such revision, however, Chauvet has no obligation to make, and does not commit to make, any such revisions. Download the latest version from www.chauvetlighting.com.

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Author	Author Date		Updated	
R. Isenstadt	08/27/15	M. Gregory	08/27/15	

### Product at a Glance

Use on Dimmer	X	Auto Programs	×
Outdoor Use	×	Auto-ranging Power Supply	Р
Sound-Active	×	Replaceable Fuse	Р
DMX	Р	User-Serviceable	×
Master/Slave	Р		

Safety Notes Please read the following Safety Notes carefully before working with the product. The Notes include important safety information about installation, usage, and maintenance.

- 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 cord 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.
- The product is not intended for permanent installation.

Never connect the product to a dimmer.

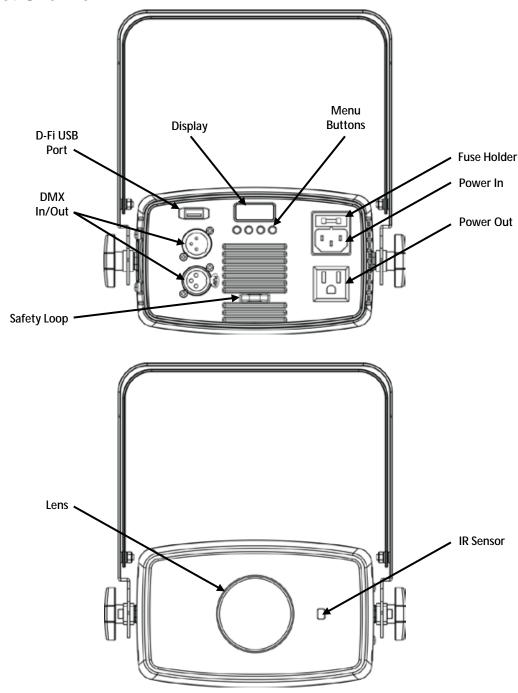
- Always make sure that the voltage of the outlet to which you are connecting the product is within the range stated on the decal or rear panel of the product.
- The product is for indoor use only! (IP20) To prevent risk of fire or shock, do not expose the product to rain or moisture.
- Always install 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.
- 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. Please contact the nearest authorized technical assistance center.
- 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.



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

# 2. Introduction

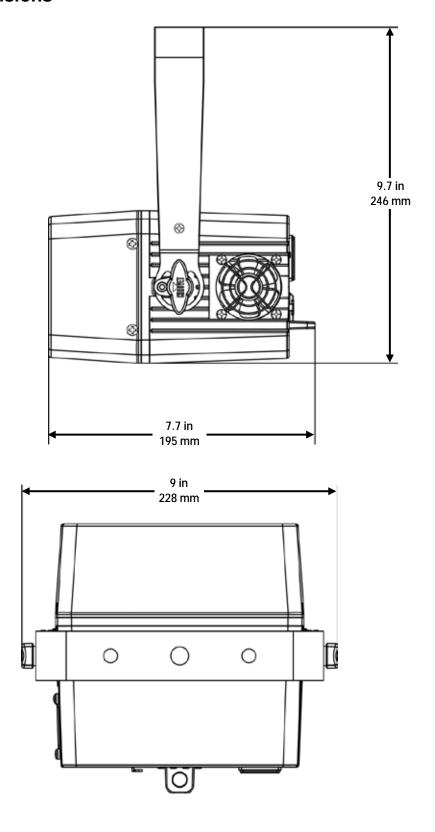
## **Product Overview**





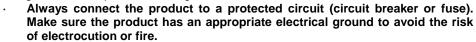
WARNING! DO NOT plug anything other than a D-Fi USB into the USB port. Doing so may cause damage to the product.

# **Product Dimensions**



# 3. SETUP

AC Power The Abyss USB 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.





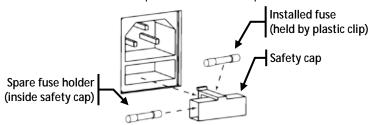
To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.



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.

### Wedge the tip of a flat-head screwdriver into the slot of the fuse holder.

- Pry the fuse holder out of the housing.
- Replacement 3. Remove the blown fuse from the holder and replace with a fuse of the exact same type and rating.
  - Insert the fuse holder back in place and reconnect power.

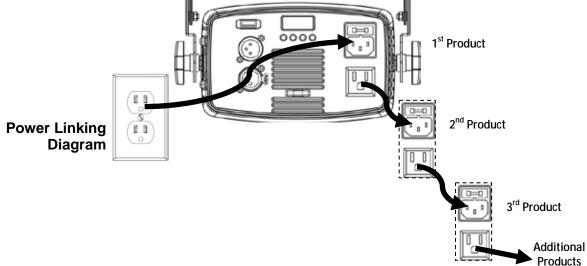




Disconnect the product from the power outlet before replacing the fuse.

### **Power Linking**

The product provides power linking via the Edison outlet located in the back of the product. Please see the diagram below for further explanation.





You can power link up to 14 Abyss USB products on 120 VAC or up to 27 Abyss USB products on 230 VAC.



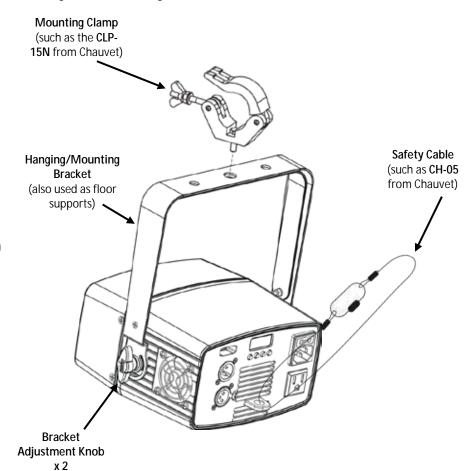
The power linking diagram corresponds to the North American version of the product ONLY! If using the product in other markets, you must consult with the local Chauvet distributor as power linking connectors and requirements may differ in your country or region.

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

Orientation The Abyss USB 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 purposes.
- Make sure that the structure onto which you are mounting the product can support the product's weight. See the Technical Specifications for weight information.
- When mounting the product overhead, always use a safety cable. Mount the product securely to a rigging point, whether an elevated platform or a truss.
- When rigging the product onto a truss, use a mounting clamp of appropriate weight
- When power linking multiple products, mount the products close enough for power linking cables 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

# **Operation**

**Control Panel**To access the control panel functions, use the four buttons located underneath the display. Please refer to the <u>Product Overview</u> to see the button locations on the control panel.

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

### Menu Map

Main Level	Programming Levels		Description	
3-CH	d 1–d512		3-channel DMX mode	
	C 1		White Static Color	
	С	2	Purple Static Color	
	С	3	Yellow Static Color	
C	С	4	Blue Static Color	
C	С	5	Green Static Color	
	С	6	Orange Static Color	
	C L	L 0-L100	Left Color Wheel Rotation (slow to fast)	
	C r r 0-r100 Stop		Right Color Wheel Rotation (slow to fast)	
			Stop Wave Effect Rotation	
Wave	WL	L 0-L100	Left Wave Effect Rotation (slow to fast)	
	Wr r 0-r100 U 0-U255		Right Wave Effect Rotation (slow to fast)	
U			Dimmer	
SET On		n	IR function on or off	
JE1	OFF		TIK TUTICUOTI OIT OIT	
teMP			Displays the product's current temperature	

### **DMX Linking**

The Abyss USB works with a DMX controller. Information about DMX is in the CHAUVET DMX available the Primer, which is from Chauvet website http://www.chauvetlighting.com/downloads/DMX\_Primer\_rev05\_WO.pdf.

### Configuration (DMX)

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

- Connect the product to a suitable power outlet.
- Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket on the product.

## **DMX Personality** and Starting

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.

Address The Abyss USB uses 3 DMX channels in a 3-CH DMX mode, which defines the highest configurable address to 510.

> If you are not familiar with the DMX protocol, download the DMX Primer from www.chauvetlighting.com.

To select the starting address, do the following:

- 1. Press <MENU> repeatedly until 3-CH shows on the display.
- Press **<ENTER>** and **d 1–d512** will show on the display.
- Use **<UP>** or **<DOWN>** to select the starting address.
- Press **<ENTER>**.

### **DMX Channel Assignments and Values**

3-CH	Channel	Function	Value

1	Channel	Function	Value	Percent/Setting
	1	Dimmer	000 <b>6</b> 255	0–100%
	2	Color Wheel	000 <b>ර</b> 021	White
			022 <b>6</b> 042	Purple
_			043 <b>ර</b> 063	Yellow
			064 <b>6</b> 084	Blue
			085 <b>6</b> 105	Green
			106 <b>ර</b> 127	Orange
			128 <b>ර</b> 188	Left rotation (fast to slow)
			189 <b>ó</b> 194	Stop
			195 <b>6</b> 255	Right rotation (slow to fast)
		Wave Effect Wheel	000	Stop
	3		001 <b>6</b> 122	Left rotation (slow to fast)
	3		123 <b>6</b> 133	Stop
			134 <b>ර</b> 255	Right rotation (fast to slow)

**D-Fi USB** The Abyss USB is able to become a D-Fi wireless receiver/transmitter with the use of the D-Fi USB from CHAUVET DJ. Simply set the product's DMX Personality and DMX Connectivity Address, set the DIP switch D-Fi receiving/transmitting channel, then plug it into the D-Fi USB port.



WARNING! DO NOT plug anything other than a D-Fi USB into the USB port. Doing so may cause damage to the product.



Once plugged in, the D-Fi USB will take over the product. Wired DMX, manual display control/menu buttons and IRC-6 will be unavailable until you unplug the D-Fi USB. The priority levels are:

1. D-Fi USB

3. IRC-6 Remote Control

2. Wired DMX

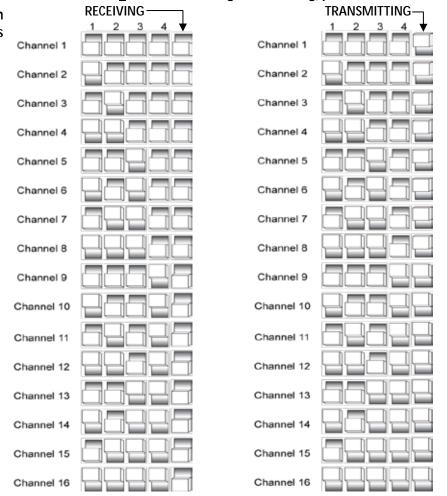
4. Manual Digital Display/Menu Buttons

### Configuration (D-Fi USB)

- 1. Set the DMX Personality and DMX address on your product.
- 2. Use the Chart provided to set **BOTH**:
  - the Channel, and then
  - the Receiving or Transmitting option.

NOTE: DIP Switch 5 is for Transmitting OR Receiving, please choose carefully.

### D-Fi USB DIP Switch Channels



# (Standalone)

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

Connect the product to a suitable power outlet.



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.

Color Wheel To set the position or the rotation direction and speed of the color wheel on the Abyss USB, follow the instructions below:

- 1. Press <MENU> repeatedly until C-- shows on the display.
- 2. Press <ENTER>.
- Use **<UP>** and **<DOWN>** to select one of the following:
  - C 1 (static white)
  - C 2 (static purple)
  - C 3 (static yellow)
  - C 4 (static blue)
  - C 5 (static green)
  - C 6 (static orange)
  - C L (left rotation)
  - **C r** (right rotation)
- Press <ENTER>.
- For C L or C r, use <UP> and <DOWN> to increase or decrease the rotation speed.
- Press <ENTER>.

# Wheel

Wave Effect To set the rotation direction and speed of the wave effect wheel on the Abyss USB, do the following:

- 1. Press <MENU> repeatedly until Wave shows on the display.
- Press **<ENTER>**.
- Use **<UP>** and **<DOWN>** to select one of the following:
  - Stop (no rotation)
  - W--L (left rotation)
  - W--r (right rotation)
- Press <ENTER>.
- For W--L or W--r, use <UP> and <DOWN> to increase or decrease the rotation speed.
- Press <ENTER>.

**Dimmer** To set the total output level of the Abyss USB, follow the instructions below:

- 1. Press <MENU> repeatedly until U-- shows on the display.
- 2. Press <ENTER>.
- 3. Use **<UP>** and **<DOWN>** to increase or decrease the total output level.
- 4. Press <ENTER>.

**Temperature** To view the product's current temperature, do the following:

- 1. Press <MENU> repeatedly until teMP shows on the display.
- 2. Press <ENTER>.

### IRC-6 Infrared Remote Control

IRC-6 Infrared The Abyss USB is compatible with the IRC-6 infrared remote control from Chauvet. To activate IR mode, follow the instructions below:

- Remote 1. Press <MENU> repeatedly until SET shows on the display.
- Control 2. Press <ENTER> to accept.
  - 3. Press **<UP>** or **<DOWN>** to select **On** or **OFF**.
  - Press < ENTER >.

#### **IRC-6 Operation**



#### **Color Wheel**

To set the color wheel rotation direction:

- 1. Press <AUTO> on the IRC-6.
- 2. Press <+> or <-> to toggle the direction.

To set the color wheel rotation speed:

- 1. Press **<SPEED>** on the IRC-6.
- 2. Press <+> or <-> to increase or decrease the rotation speed.

To set a static color:

- · For white, press <1> on the IRC-6.
- · For purple, press <2> on the IRC-6.
- For yellow, press <3> on the IRC-6.
- · For blue, press <4> on the IRC-6.
- · For green, press <5> on the IRC-6.
- For orange, press <6> on the IRC-6.

#### **Wave Effect Wheel**

To set the wave effect wheel rotation direction:

- 1. Press <SOUND> on the IRC-6.
- Press <+> or <-> to toggle the direction.

To set the wave effect wheel rotation speed:

- 1. Press **<SENSITIVITY>** on the IRC-6.
- 2. Press <+> or <-> to increase or decrease the rotation speed.

#### Dimmer

To adjust the dimmer level:

- 1. Press **<MANUAL>** or **<W>** on the IRC-6 for full dimmer control,
  - Press <%> on the IRC-6 for 10-step dimmer control.
- Press <+> or <-> to increase or decrease the dimmer level.

#### **Black Out**

To black out the light:

Press <BLACK OUT> on the IRC-6.

This will turn off the light 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.



All other buttons on the IRC-6 infrared remote control have no function with this product.

Master/Slave The Master/Slave mode allows a single Abyss USB product (the master) to control the actions of one or more Abyss USB products (the slaves) without the need of a DMX Mode actions of one of more Abyss GOD product, and characteristic controller. The master product will be set to operate in either Stand-Alone mode or with the (wired) 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 3-CH shows on the display.
- 2. Press <ENTER> to accept.
- Set the DMX address to d 1.
- Connect the DMX input of the first slave product to the DMX output of the master product.
- 5. Connect the DMX input of the subsequent slave products to the DMX output of the previous slave product.
- 6. Finish setting and connecting all the slave products.

#### Master product:

- 1. Set the master product in Stand-Alone 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.

Master/Slave The D-Fi USB allows a single Abyss USB product (the master) to control the actions of one or more Abyss USB products (the slaves) without the need of a DMX controller or DMX Mode cables. The master (transmitter) product will be set to operate in either Stand-Alone mode (**D-Fi USB**) or with the IRC-6, while the slave (receiver) 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 3-CH shows on the display.
- Press **<ENTER>** to accept.
- Set the DMX address to d 1.
- Set the D-Fi USB to receive on a specific channel, 1–16.
- Plug in the D-Fi USB.
- Finish setting and connecting all the slave products.

- Press **<MENU>** repeatedly until **3-CH** shows on the display.
- Press <ENTER> to accept.
- Set the DMX address to d 1.
- 4. Set the master product in Stand-Alone mode or with the IRC-6.
- Set the D-Fi USB to transmit on the D-Fi channel the slaves are receiving on. 5.
- Plug in the D-Fi USB.



- All products must be set to the same DMX personality, DMX address, and D-Fi channel.
- Configure all the slave products before configuring the master to transmit.
- Never connect a DMX controller to a D-Fi channel configured for Master/Slave operation because the controller may interfere with the signals from the master.

## 5. MAINTENANCE

# Maintenance

Product 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 your 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:

- 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.
- Clean all 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. 5.
- 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

Dimensions and	Length	Width	Height	Weight	
Weight	7.7 in (195 mm)	9 in (228 mm)	9.7 in (246 mm)	5.8 lb (2.7 kg)	
	Note: Dimensions in inches	rounded to the near	est decimal digit.		
Power	Power Supply Type	R	ange	Voltage Selection	
	Switching (internal)	100 to 240	VAC, 50/60 Hz	Auto-ranging	
	Parameter 120 V, 60 Hz		/, 60 Hz	230 V, 50 Hz	
	Consumption	3	8 W	37 W	
	Operating Current	0	.5 A	0.3 A	
	Power linking current (products)	8 A (14	products)	8 A (27 products)	
	Fuse	T 1 A	a, 250 V	T 1 A, 250 V	
	Power I/O	U.S./W	orldwide	UK/Europe	
	Power input connector IEC		EC	IEC	
	Power output connector Edison		IEC		
	Power Cord plug Edison (U.S.)		on (U.S.)	Local plug	
Light Source	Type Power		ower	Lifespan	
•	LED	3	0 W	50,000 hours	
	Color	Qu	antity	Current	
	Cool white		1	7 A	
Photometrics	Parameter				
	Coverage Angle	:	59°		
	Illuminance @ 2 m	inance @ 2 m 715 lux			
Thermal	Maximum External Temp. Cooling System		g System		
	104 °F (40 °C)				
DMX	I/O Connectors	Chann	el Range		
	3-pin XLR		3		
Ordering	Product Name	Iten	n Code	UPC Number	
J	Abyss USB	030	51059	781462214074	



## **RETURNS**

In case you need to get support or return a product:

- If you are located in the U.S., contact Chauvet World Headquarters.
- If you are located in the UK or Ireland, contact Chauvet Europe Ltd.
- If you are located in Mexico, contact Chauvet Mexico.
- · If you are located in Benelux, contact Chauvet Europe BVBA.
- If you are located in any other country, DO NOT contact Chauvet. Instead, contact
  your local distributor. See <a href="www.chauvetlighting.com">www.chauvetlighting.com</a> for distributors outside the U.S.,
  UK, Ireland, Mexico, or Benelux.



If you are located outside the U.S., UK, Ireland, Mexico, or Benelux, contact your distributor of record and follow their instructions on how to return Chauvet products to them. Visit our website <a href="www.chauvetlighting.com">www.chauvetlighting.com</a> for contact details. 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.

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
- 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

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Sunrise, FL 33351

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Belgium

Voice: +32 9 388 93 97

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Pinxton, Nottingham, UK

**NG16 6NT** 

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**MEXICO** 

**General Information** - Chauvet Mexico

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Parque Industrial Lerma

Lerma, Mexico C.P. 52000

World Wide Web +52 (728) 285-5000 www.chauvet.com.mx

Outside the U.S., United Kingdom, Ireland, Mexico, or Benelux contact the dealer of record. Follow their instructions to request support or to return a product. Visit our

website for contact details.

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Voice: (954) 577-4455 (Press 4)

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**World Wide Web** 

**Technical Support** 

www.chauvetlighting.co.uk