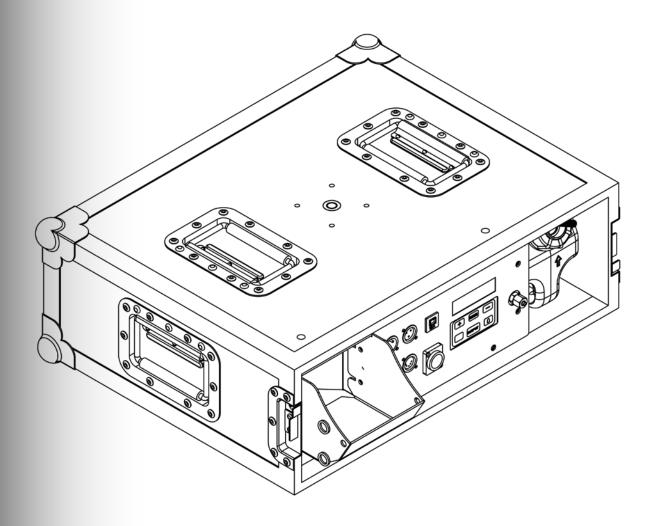
Amhaze

User Manual







Edition Notes

The Amhaze™ II User Manual Rev. 1 covers the description, safety precautions, installation, programming, operation, and maintenance of the Amhaze™ II. CHAUVET® released this edition of the Amhaze™ II User Manual in November 2013.

Trademarks CHAUVET® is a registered trademark of CHAUVET & Sons Inc. (d/b/a CHAUVET® or Chauvet). The CHAUVET® logo in its entirety including the CHAUVET® name and the dotted triangle, and all other trademarks in this manual pertaining to services, products, or marketing statements are owned or licensed by CHAUVET®. Any other product names, logos, brands, company names, and other trademarks featured or referred to within this document are the property of their respective trademark holders.

Copyright Notice

CHAUVET® owns the content of this User Manual in its entirety, including but not limited to pictures, logos, trademarks, and resources.

© Copyright 2013 CHAUVET®. All rights reserved.

Electronically published by CHAUVET® in the United States of America.

Manual Use CHAUVET® authorizes its customers to download and print this manual for professional information purposes only. CHAUVET® expressly prohibits the usage, copy, storage. distribution, modification, or printing of this manual or its content for any other purpose without written consent from CHAUVET®.

Document Printing

For better results, print this document in color, on letter size paper (8.5 x 11 in), doublesided. If using A4 paper (210 x 297 mm), configure your printer to scale the content accordingly.

Intended Audience

Any person in charge of installing, operating, and/or maintaining this product should completely read through the guide that shipped with the product, as well as this manual, before installing, operating, or maintaining this product.

Disclaimer

CHAUVET® believes that the information contained in this manual is accurate in all respects. However, CHAUVET® assumes no responsibility for any errors or omissions in this document. CHAUVET® reserves the right to revise and make changes to the content of this document without obligation that CHAUVET® notify any person or company of such revision or changes. This does not in any way constitute a commitment by CHAUVET® to make such changes. CHAUVET® may issue a revision of this manual or a new edition to incorporate such changes.

Document Revision

The Amhaze™ II User Manual Rev. 1 is the first edition of this manual. Go to www.chauvetpro.com for the latest version.

Author	Date	Editor	Date
A. Leon	11/11/13	D. Couppe	11/11/13



Table of Contents

1. Before You Begin	1
What is Included	1
Claims	
Manual Conventions	
Symbols	
Product at a Glance	
Safety Notes	
Personal Safety	
Mounting and Rigging	
Power and Wiring	
Operation	
2. Introduction	3
Description	3
Features	
Overview	
Dimensions	
3. Setup	6
AC Power	6
AC Plug	
Resetting the Breaker	
DMX Linking	
DMX Modes	
Mounting	
Orientation	
Rigging	
4. Operation	
•	
Control Panel Description	
Control OptionsProgramming	
Preparing for OperationStartup	
Menu Map	
DMX Values	
Configuration (DMX)	
Starting Address	
Setting the Output Volume	
Timer Mode	
Manual Mode	
Timer Mode Parameters	
Activating the Fluid Sensor	

Table of Contents



5. Technical Information	
Hazer Maintenance	1;
Storage	
Technical Specifications	
Returns	
Contact Us	1,



1. Before You Begin

What is Included ·

- Amhaze™ II
- Neutrik® powerCON® power cord
- Warranty Card
- Quick Reference Guide

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

> 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.

Manual Conventions

Convention	Meaning	
1–512	A range of values in the text	
50/60	A set of mutually exclusive values in the text	
<set> A button on the product's control panel</set>		
Settings	A product function or a menu option	
MENU>Settings A sequence of menu options		
1–10 A range of menu values from which to choose in a menu		
Yes/No	A set of two mutually exclusive menu options in a menu	
ON A unique value to be entered or selected in a menu		

Symbols

Symbols	Meaning
<u>^</u>	Critical installation, configuration, or operation information. Failure to comply with this information may cause the product not to work, damage third-party equipment, or cause harm to the operator.
\bigcirc	Important installation or configuration information. Failure to comply with this information may keep the product from working.
	Useful information.



The term "DMX" used throughout this manual refers to the USITT DMX512-A digital data transmission protocol.

Amhaze™ II User Manual Rev. 1 -1-



Product at a Glance

Use on Dimmer	×	Auto Programs	X
Outdoor Use	X	X Fixed Voltage (120 V or 230 V)	
Sound-Active	X	Circuit Breaker	Р
DMX	Р	User-Serviceable	X
Master/Slave	X		

Safety Notes

Read all the following Safety Notes before working with this product. These notes include important information about the installation, usage, and maintenance of this product.



This product contains no user-serviceable parts. Any reference to servicing in this User Manual will only apply to properly trained CHAUVET® certified technicians. Do not open the housing or attempt any repairs.



All applicable local codes and regulations apply to proper installation of this product.

Personal Safety

- Always connect this product to a grounded circuit to avoid the risk of electrocution.
- · Always disconnect this product from its power source before servicing.
- Do not touch this product's housing during operation because it may be very hot.
- Do not drink or become in contact with the haze fluid. If you do, call your local emergency service (911 in the US) for help.

Mounting and Rigging

- This product is not intended for permanent installation.
- This product is for indoor use only! (IP20) To prevent risk of fire or shock, do not expose this product to rain or moisture.
- Mount this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- · Make sure there are no flammable materials close to this product while it is operating.
- When mounting this product overhead, always secure to a fastening device using a safety cable.
- Do not mount the product on a flammable surface (linoleum, carpet, wood, paper, carton, plastic, etc.).

Power and Wiring

- Make sure the power cord is not crimped or damaged.
- Always make sure you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- Never connect this product to a dimmer pack or rheostat.
- Never disconnect this product by pulling or tugging on the power cable.

Operation

- Do not operate this product if you see damage to the housing, fluid tank, or cables. Have the damaged parts replaced by an authorized technician at once.
- Be sure that no ventilation slots on the product's housing are blocked.
- Never carry the product from the power cord or any moving part. Always use the handles.
- The haze exits the nozzle at a very high temperature. Keep a minimum distance of 6.5 ft (2 m) from the nozzle to the nearest object.
- The product's nozzle is very hot during operation and it remains hot for a long time after operation has stopped.
- The maximum ambient temperature is 104 °F (40 °C). Do not operate this product at a higher temperature.
- In the event of a serious operating problem, stop using this product immediately!
- Do not add perfume, alcohol, gasoline, or any other flammables to the haze fluid.
- Use CHAUVET® water-based Premium Haze Fluid (PHF) and High Performance Haze Fluid (HFG).



In the unlikely event that your CHAUVET® product may require service, contact CHAUVET® Technical Support.

-2- Amhaze™ II User Manual Rev. 1



2. Introduction

Description

The Amhaze™ II is a professional water-based haze machine. Adjustable via DMX or the LCD screen, you can achieve continuous variable haze output and blower speed. Vent accessory allows directional control of haze flow. The hazer is tour-ready with a rugged road case and an M13 threaded rigging insert. It works with a variety of different water-based haze fluid types for added versatility, including Premium Haze Fluid (PHF) and High Performance Haze Fluid (HFG) available from CHAUVET®.

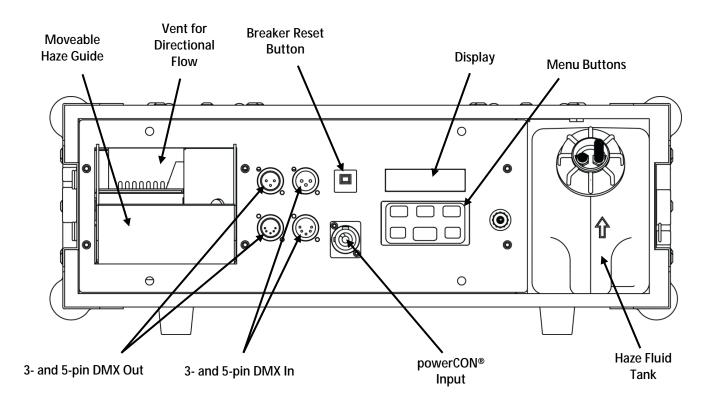
Features

- · Water-based haze machine
- Operating mode:
 - · 2-channel: fan speed and haze output volume
- Directional haze flow
- · 3- and 5-pin XLR data input and output connectors

Amhaze™ II User Manual Rev. 1 -3-



Overview

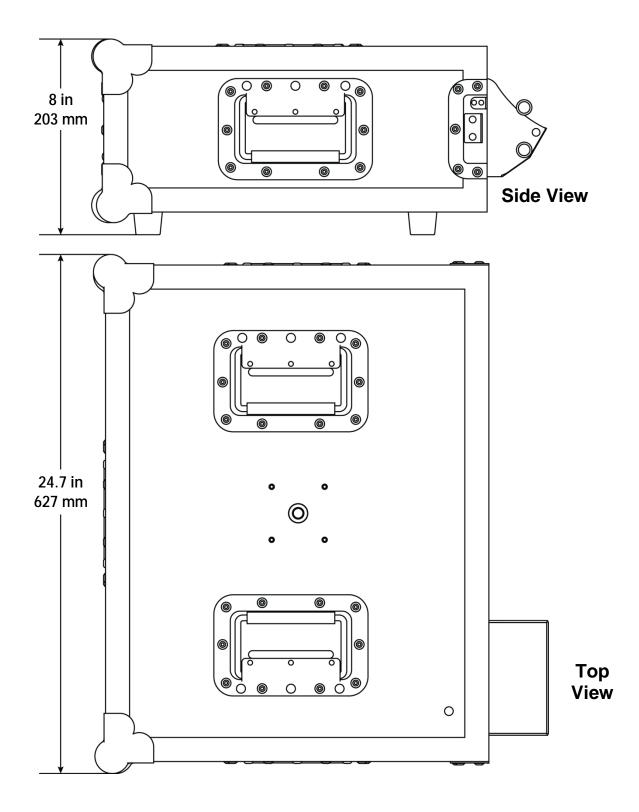


Rear View

-4- Amhaze™ II User Manual Rev. 1



Dimensions



Amhaze™ II User Manual Rev. 1 -5-



3. Setup

AC Power

The Amhaze™ II has a fixed power supply that works with an input voltage of either 120 VAC, 60 Hz or 230 VAC, 50 Hz, depending on the specific model. To determine the power requirements for each Amhaze™ II, refer to the label affixed to the product. You can also refer to the Technical Specifications chart in this manual.

The listed current rating indicates the maximum current draw during normal operation. For more information, you may download Sizing Circuit Breakers from the CHAUVET® website www.chauvetpro.com.



Always connect this product to a protected circuit with an appropriate electrical ground to avoid the risk of electrocution or fire.



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

AC Plua

The Amhaze™ II comes with a power input cord terminated with a Neutrik® powerCON® A connector on one end and an Edison plug on the other end (U.S. market). If the power input cord that came with your product has no plug, or if you need to change the Edison plug, use the table below to wire the new plug to the power input cord.

Connection	Wire (U.S.) Wire (Europe)		Screw Color
AC Live	Black	Brown	Yellow or Brass
AC Neutral	White	White Blue	
AC Ground	Green/Yellow	Green/Yellow	Green

Resetting the Breaker The Amhaze™ II uses a resettable circuit breaker. Follow the instructions below to reset.



Disconnect the product from the power before resetting the breaker.

This product is equipped with a resettable circuit breaker. If the breaker trips, all sections of this product will lose power.

- 1. Disconnect the hazer from power.
- 2. Allow the hazer to cool for 15 minutes.
- 3. After 15 minutes, try to reset the breaker by pressing the button until it latches in the operation position.
- 4. Connect the hazer to power and continue using as recommended.



If the breaker does not reset (the breaker button will not remain latched), contact CHAUVET® immediately.

DMX Linking

You can link the Amhaze™ II to a DMX controller using a standard DMX serial connection. If using other DMX-compatible products with the Amhaze™ II, you can control each individually with a single DMX controller.

DMX Modes

The Amhaze™ II uses the standard DMX data connection for its 2-channel DMX mode.

- Refer to the Introduction chapter for a brief description of this mode.
- Refer to the Operation chapter to learn how to configure the Amhaze™ II to work in this mode.
- The DMX Values section provides you with detailed information regarding the DMX



If you are not familiar with or need more information about DMX standards or the DMX cables needed to link this product to a DMX controller, download the DMX Primer from the CHAUVET® website: www.chauvetpro.com.

-6-Amhaze™ II User Manual Rev. 1



Mounting

Before mounting this product, read and follow the <u>Safety Notes</u>.

Orientation Always mount this product in a safe position. The Amhaze™ II may be mounted in any position; however, make sure there is adequate room for ventilation, configuration, and

maintenance.

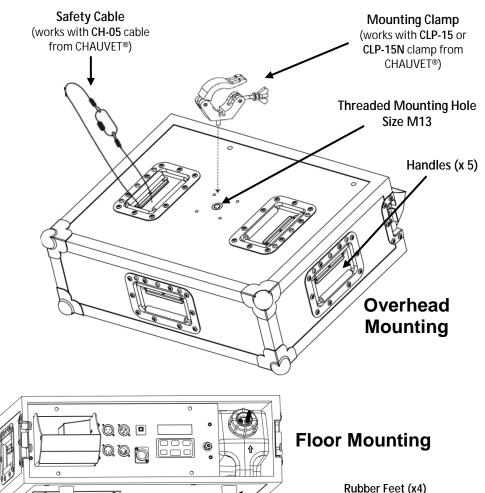
Rigging

CHAUVET® recommends using the following general guidelines when mounting this product.

- When selecting an installation location, consider easy access to this product for operation, programming adjustments, and routine maintenance.
- Make sure to mount this product away from any flammable material as indicated in the Safety Notes.
- Never mount in places where rain, high humidity, extreme temperature changes, or restricted ventilation may affect the product.
- If hanging this product, make sure that the mounting location can support the product's weight. See the <u>Technical Specifications</u> for the weight-bearing requirements of this product.
- · When hanging this product, always secure to a fastening device using a safety cable.

Procedure

The Amhaze™ II has a threaded mounting hole, size M13, at the top of the hazer. This mounting hole is appropriate for use with a mounting clamp. You must supply your own mounting clamps, so be sure the clamp is capable of supporting the weight of this product.



for floor mounting

Mounting Diagram

Amhaze™ II User Manual Rev. 1 -7-



4. Operation

Control Panel Description

Button	Function	
<function></function>	Enters the programming mode	
<volume></volume>	Controls the haze pump to modify the output volume	
<timer></timer>	Starts the timer controlled operation	
<manual></manual>	Allows momentary haze output for as long as the button is held down	
<up></up>	Scrolls up the list of menu options or increases the numeric value when in a function	
<down></down>	Scrolls down the list of menu options or decreases the numeric value when in a function	

Control Options

You can set the starting address of the Amhaze™ II in the **001–512** DMX range. This enables control of up to 256 products in its 2-channel mode.

Programming

Refer to the Menu Map for a description of your programming options. The menu map shows the main level and a variable number of programming levels for each option.

Preparing for Operation

To prepare the Amhaze™ II for operation, perform the following steps.

- 1. Open the flight case.
- 2. Withdraw the fluid tank from its compartment and remove its cap.
- Verify that the two plastic hoses attached to the cap are in place and in good condition.
- 4. Pour CHAUVET® (PHF or HFG) haze fluid into the tank and replace the cap.
- 5. Put the tank back into its compartment in the hazer.
- 6. Make sure the plastic hose entering the hazer from the fluid tank cap is not bent or kinked.
- 7. To direct the haze up or down, pull the haze guide from the front panel of the haze machine and reinstall it in the desired position.
- 8. Connect the hazer to power and **Warming Up** shows on the display during the heating-up process. After approx. 2 minutes, the display changes to **Ready To Haze** when the machine is ready to output haze.



In any of the operation modes, the display must show *Ready To Haze* to output haze.

Startup

The Amhaze™ II does not have an On/Off switch. As soon as you connect the Amhaze™ II to power, it will start operating.

To start up the Amhaze™ II, do the following:

- 1. Prepare for operation, as described in <u>Preparing for Operation</u>.
- 2. Press **<VOLUME>**.
- 3. Adjust haze output volume by using **<UP>** or **<DOWN>**.

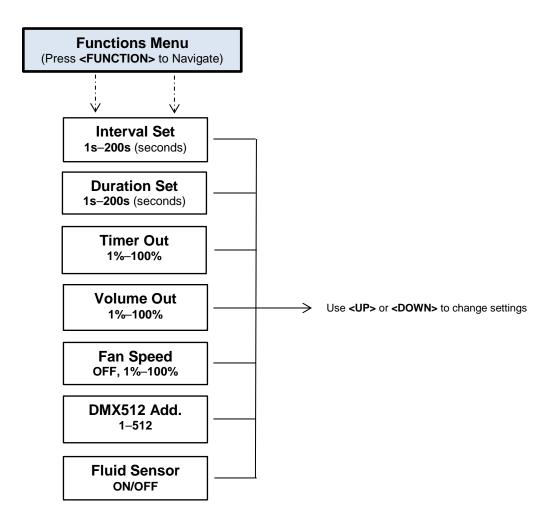


Repeat the startup procedure after transporting the Amhaze™ II or after refilling with haze fluid.

-8- Amhaze™ II User Manual Rev. 1



Menu Map



Amhaze™ II User Manual Rev. 1 -9-



DMX Values

2 Channels

3	Channel	Function	Value	Percent/Setting
	1	Fan Volume	000 Ó 005 006 Ó 255	·
			000 Ó 255	
2	Output Volume	006 Ó 255		

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

1. Connect the product to power. (DMX)

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 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 Amhaze™ II uses up to 2 DMX channels in its DMX mode, which defines the highest configurable address to 511.

If unfamiliar with DMX, download the DMX Primer from www.chauvetpro.com.

To select the starting address, do the following:

- 1. Press **<FUNCTION>** repeatedly until **DMX512 Add.** shows on the display.
- 2. Use **<UP>** or **<DOWN>** to select the starting address **1–512**.



Make sure that the starting addresses on the various products do not overlap due to the new personality setting.

Setting the Output To adjust the volume of the haze output, do the following.

- 1. Press <FUNCTION> repeatedly until Volume Out shows on the display.
- 2. Use **<UP>** or **<DOWN>** to select the desired percent output volume (1%–100%).
- 3. Press **<VOLUME>** to initiate this output.
- 4. Press < VOLUME> again to trigger the haze output with this output volume setting.



After turning off the Amhaze™ II, this output volume setting will remain in its memory. To change the output volume for subsequent operation of the Amhaze™ II, simply repeat the steps above.

Setting the Fan Speed To adjust the fan speed for the haze output, do the following.

- 1. Press **<FUNCTION>** repeatedly until **Fan Speed** shows on the display.
- 2. Use **<UP>** or **<DOWN>** to select the desired percent total speed (1%–100%) or OFF.

-10-Amhaze™ II User Manual Rev. 1



Timer Mode When in Timer mode, the Amhaze™ II will produce haze in pre-configured time intervals defined by the Interval Set and Duration Set menu options. In addition, the output volume during Timer mode is set by the Timer Out menu option. See the Timer Mode Parameters section for details about how to configure these parameters.

To operate in Timer mode, do the following:

- 1. Press **<TIMER>** and the display will show a countdown of the interval timer.
- 2. When the counter reaches zero (**0**), the Amhaze[™] II will start producing haze.
- 3. The haze output duration during Timer mode is set by the **Duration Set** menu
- 4. The haze output volume during Timer mode is set by the **Timer Out** menu option.
- 5. This cycle will repeat itself until you press <TIMER> again or until the Amhaze™ II runs out of fluid.

Manual Mode In the Manual mode, the Amhaze™ II will output haze for as long as <MANUAL> remains pressed. The output volume will be at 100% full haze output.

To operate in Manual mode, do the following:

- Press < MANUAL>.
- This mode will continue until you release <MANUAL> or until the Amhaze™ II runs out of fluid.

Parameters Timer mode.

Timer Mode These parameters determine the intervals and output volume for the Amhaze™ II while in

To configure these parameters do the following.

- 1. Press **<FUNCTION>** repeatedly until **Interval Set** shows on the display.
- 2. Use **<UP>** or **<DOWN>** to select the time in seconds (1s-200s) between haze output.
- 3. Press **<FUNCTION>** repeatedly until **Duration Set** shows on the display.
- 4. Use <UP> or <DOWN> to select the time in seconds (1s-200s) for the duration of the haze output.
- 5. Press **<FUNCTION>** repeatedly until **Timer Out** shows on the display.
- 6. Use **<UP>** or **<DOWN>** to set the haze output volume (1%–100%).

Activating the Fluid The Amhaze™ II has a fluid sensor that can detect when the amount of haze fluid in the Sensor haze fluid tank has reached a low level.

To activate the fluid sensor, do the following.

- 1. Press **<FUNCTION>** repeatedly until **Fluid Sensor** shows on the display.
- 2. Use **<UP>** or **<DOWN>** to select **ON**.

Note: Selecting **OFF** turns off the fluid sensor.



While operating the Amhaze™ II, make sure there is adequate haze fluid in the machine to prevent pump and heater damage. You can check the fluid level in the tank visually or by activating the fluid sensor. When the fluid level becomes low, simply add more fluid to continue using the Amhaze™ II.

Amhaze™ II User Manual Rev. 1 -11-



5. Technical Information

Hazer Maintenance Do not allow the haze machine to become clogged. After every 40 hours of continuous operation, use CHAUVET® Fog Cleaner Quart (FCQ) through the system to prevent the accumulation of particulate matter in the heating element.

The recommended cleaning procedure is as follows.

- 1. Unplug the product from power.
- 2. Empty all haze fluid from the machine.
- Add cleaning solution to the tank.
- 4. Connect the product to power and allow it to warm up.
- 5. Run the unit in a well-ventilated area until the tank is almost empty. Do not allow the pump to run dry.
- 6. Refill with haze fluid to continue using the hazer. Run the machine briefly to clear any cleaning solution from the pump and heater.



FCQ (Fog Cleaner Quart) was specifically developed by CHAUVET® to clean your Amhaze™ II. Make sure you use FCQ regularly to increase the life of your hazer.



Do not spin the fans using compressed air because you could damage the hazer.

Storage

Before storing the hazer, run FCQ through the system as described in the cleaning procedure above; however, only follow steps 1 through 5. Do not refill the tank with hazer fluid if storing the hazer. Cleaning the system prior to storage will help prevent any particles from condensing inside the pump or heater while not in use.



Test-run your Amhaze™ II on a monthly basis to achieve the best performance.

-12-Amhaze™ II User Manual Rev. 1



Technical Specifications

Dimensions and	Length	Width	Height	Weight
Weight	21.5 in (546 mm)	24.7 in (627 mm)	8 in (203 mm)	41.2 lb (18.7 kg)
	est decimal digit.			
Power	Power Supply Type	Range		Voltage Selection
	Model-specific	120 VAC, 6 or 230 VAC,		Fixed
	Parameter	120 V, 60	Hz	230 V, 50 Hz
	Consumption	760 W		250 W
	Operating current	6.3 A		5 A
	Breaker	8 A		8 A
	Power	U.S./World	wide	Europe
	Power input connector	or Neutrik® power	CON® A	Neutrik® powerCON® A
	Power cord plug	Edison (U	.S.)	Local plug
Operation/Capacity/	Heat-up Time	Tank Capa	acity	Fluid Consumption
Consumption	2 min	0.92 gal (3	3.5 I)	18 ml/min
Misc.	Output			
	3,500 cfm			
Thermal	Max. External Tempera	ture Cooling Sy	stem	
	104 °F (40 °C)	Fan-Assisted Co	onvection	
DMX	I/O Connectors	Connector	Туре	Channel Range
	3- and 5-pin XLR	Sockets	S	2
Ordering	Product Name	Item Cod	de	UPC Number
	Amhaze™ II (120 V)	0507074	12	781462210908
	Amhaze™ II (230 V)	0507074	13	781462210915
				RoHS





Returns

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

Call CHAUVET® 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(s) for the return.

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



DO NOT write the RMA number directly on the box. Instead, write it on a properly affixed label.

Once you have received the RMA number, include the following information on a piece of paper inside the box:

- Your name
- Your address
- Your phone number
- · RMA number
- A brief description of the problem(s)

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



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

Contact Us WORLD HEADQUARTERS - CHAUVET®

General Information

Address: 5200 NW 108th Avenue Voice: (954) 577-4455 (Press **4**) Sunrise, FL 33351 Fax: (954) 756-8015

Voice: (954) 577-4455 Email: <u>tech@chauvetlighting.com</u>
Fax: (954) 929-5560

Toll free: (800) 762-1084 World Wide Web www.chauvetlighting.com

UNITED KINGDOM AND IRELAND - CHAUVET® Europe Ltd.

General Information Technical Support

Address: Unit 1C Email: uktech@chauvetlighting.com

Brookhill Road Industrial Estate

Pinxton, Nottingham, UK

NG16 6NT

Voice: +44 (0)1773 511115 Fax: +44 (0)1773 511110

MEXICO - CHAUVET® Mexico

World Wide Web www.chauvetlighting.co.uk

Technical Support

General Information

Address: Av. Santa Ana 30

Technical Support

Email: servicio@chauvet.com.mx

Parque Industrial Lerma
Lerma, Mexico C.P. 52000

World Wide Web www.chauvet.com.mx

Voice: +52 (728) 285-5000

Outside the U.S., United Kingdom, Ireland, or Mexico, contact your dealer. Follow their instructions to request support or to return a product. Visit our website for contact details.