Amhaze™ *Studio*

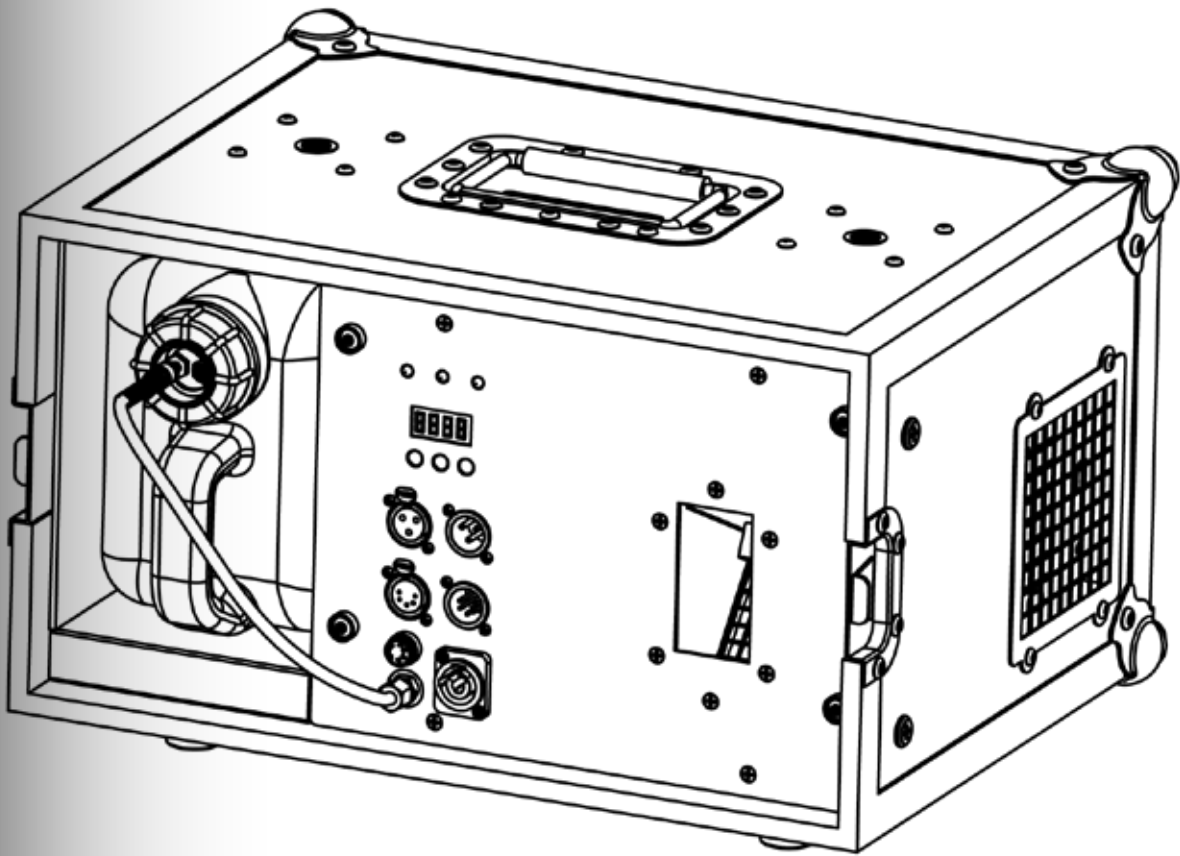## User Manual

CHAUVET
PROFESSIONAL

Edition Notes

The Amhaze™ Studio User Manual Rev. 2 covers the description, safety precautions, installation, programming, operation, and maintenance of the Amhaze™ Studio. Chauvet released this edition of the Amhaze™ Studio User Manual in February 2015.

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Document Printing

For better results, print this document in color, on letter size paper (8.5 x 11 in), double-sided. 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

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Document Revision

The Amhaze™ Studio User Manual Rev. 2 supersedes all previous versions of this manual. Discard any older versions of this manual and replace with this version. Go to www.chauvetprofessional.com for the latest version.

Author	Date	Editor	Date
D. Couppe	4/15/15	M. Trouard	04/20/15

Table of Contents

1. BEFORE YOU BEGIN

What Is Included
- Amhaze™ Studio
- 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
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
⚠	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.
ⓘ	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.**

Product At A Glance

Use on Dimmer	✖	Auto Programs	✖
Outdoor Use	✖	Fixed Voltage (120 V or 230 V)	P
Master/Slave	✖	Replaceable Fuse	P
DMX	P	User-Serviceable	✖

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

- Depending on the amount of haze generated, all haze machines may set off smoke detectors.
- Drain the tank before transporting the product.
- Always disconnect this product from its power source before servicing.
- The product's nozzle is very hot during operation and it remains hot for a long time after operation has stopped.
- Always connect this product to a grounded circuit to avoid the risk of electrocution.
- 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.
- Do not use for space heating purposes.
- Do not touch this product's housing during operation because it may be very hot.

Mounting And Rigging

- The product is not intended for permanent installation.
- This product is for indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture. (IP20)
- CAUTION: When transferring product from extreme temperature environments, (e.g. cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow product to fully acclimate to the surrounding environment before connecting it to power.
- 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 hanging this product, always secure to a fastening device using a safety cable.

Power And Wiring

- 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.
- 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 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.
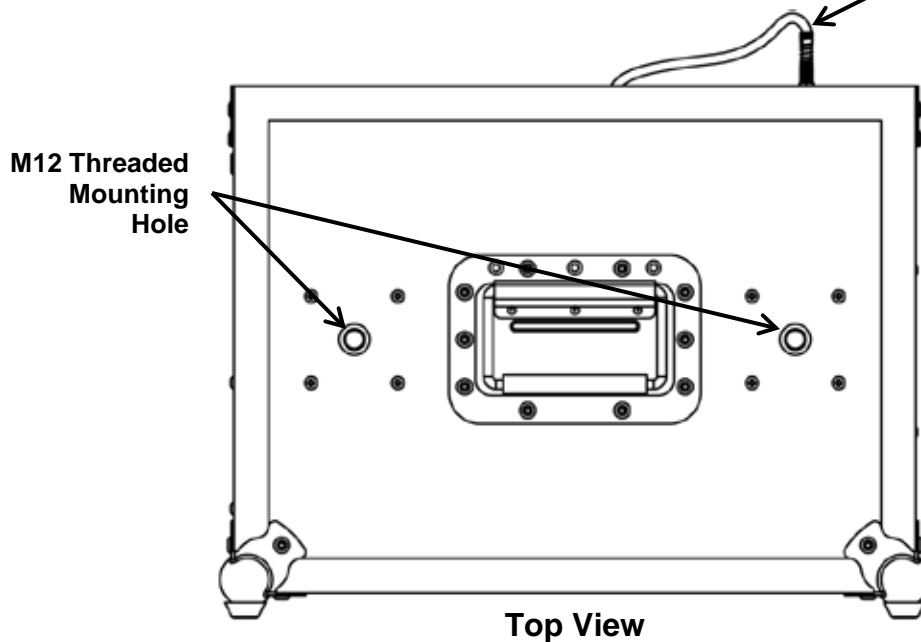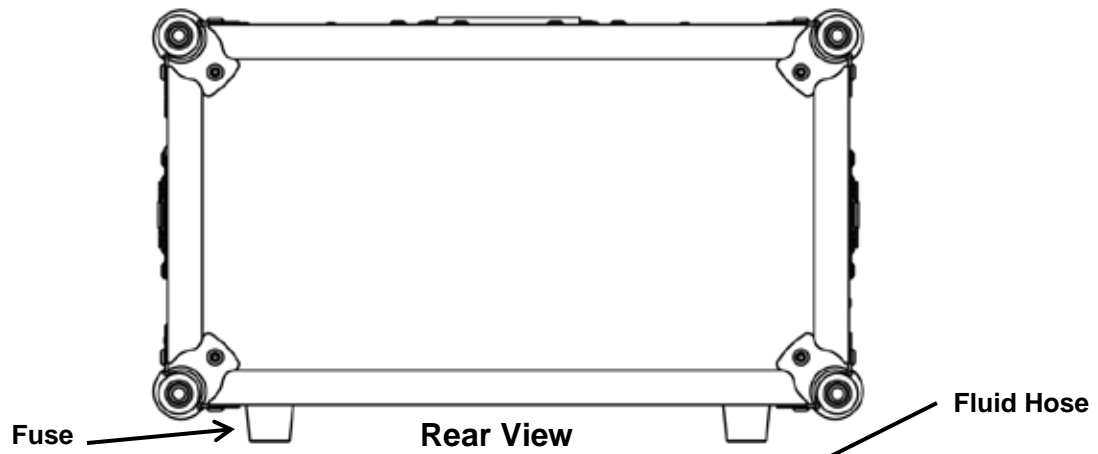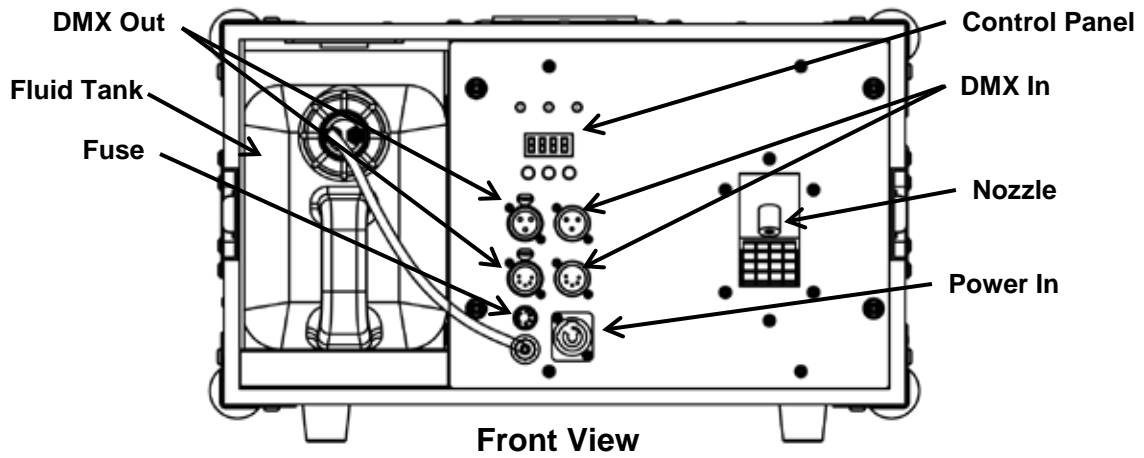- Use only CHAUVET® water-based Premium Haze Fluid (PHF) and High Performance Haze Fluid (HFG).

In the unlikely event that your Chauvet product may require service, contact Chauvet Technical Support.
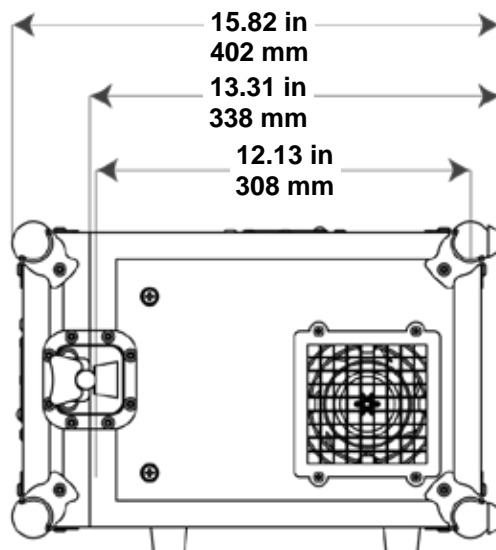
2. INTRODUCTION

Description The Amhaze™ Studio is a professional water-based haze machine. Adjustable via DMX or the LCD screen, you can achieve continuous variable haze output and blower speed. The hazer is tour-ready with a rugged flight case and an M12 threaded rigging insert. It can work with a variety of different water-based haze fluid types for added versatility; Chauvet recommends Premium Haze Fluid (PHF) and High Performance Haze Fluid (HFG) available from Chauvet.

Features
· Water-based haze machine
· Operating modes:
    · 2-channel: fan speed and haze output volume
· Quiet operation for use in theatres and TV studios
· Variable output of haze for better atmospheric maintenance
· Large 3.2 l fluid capacity and rapid 4-minute heat time
· Ready lights signals the user when heating is complete
· Digital display for DMX addressing and stand-alone functions
· Flight case integrated into design

Overview

DMX Out

Fluid Tank

Fuse

Control Panel

DMX In

Nozzle

Power In

Front View

Fuse

Rear View

Fluid Hose

M12 Threaded Mounting Hole

Top View

Dimensions

8.70 in
221 mm

9.53 in
242 mm

10.24 in
260 mm

10.78 in
274 mm

17.75 in
451 mm

17.05 in
433 mm

15.83 in
402 mm

11.02 in
280 mm

15.82 in
402 mm

13.31 in
338 mm

12.13 in
308 mm
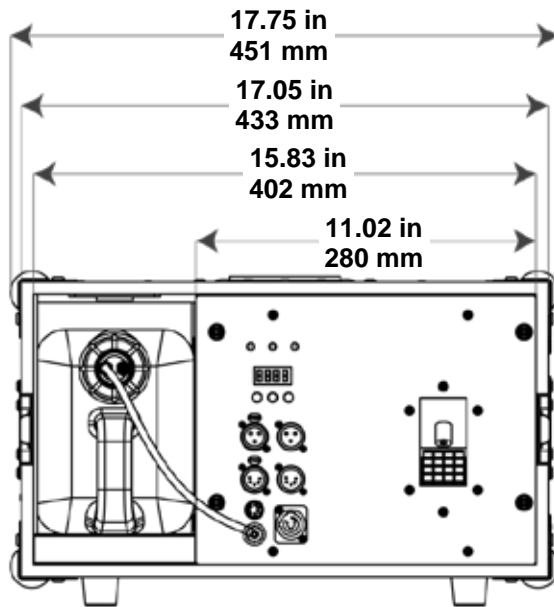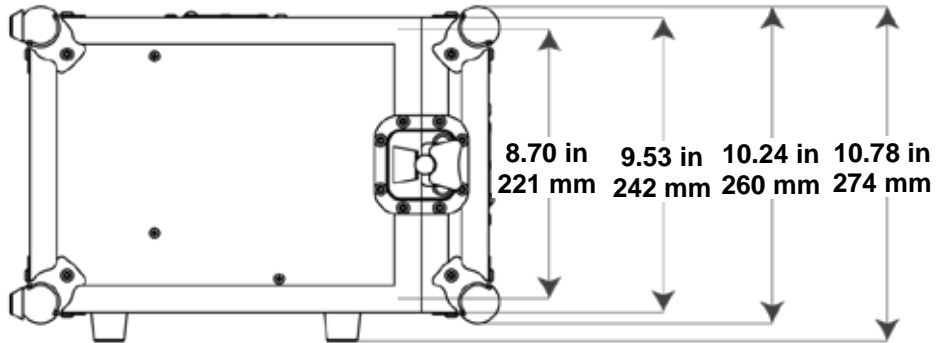
3. SETUP

AC Power The Amhaze™ Studio 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.chauvetprofessional.com.

⚠ · **Always connect this product to a protected circuit with 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 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 Plug The Amhaze™ Studio 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.

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

Fuse Replacement
1. Disconnect this product from the power outlet.
2. Using a Phillips-head screwdriver, unscrew the fuse holder cap from the housing.
3. Remove the blown fuse and replace with another fuse of the same type and rating (F 7 AL, 250 V).
4. Screw the fuse holder cap back in place and reconnect power.

⚠ **Make sure to disconnect the product's power cord before replacing a blown fuse. Always replace the blown fuse with another of the same type and rating.**

DMX Linking You can link the Amhaze™ Studio to a DMX controller using a 3- or 5-pin DMX connection. If using other DMX-compatible products with the Amhaze™ Studio, you can control each individually with a single DMX controller.

DMX Personalities The Amhaze™ Studio uses a 3- or 5-pin DMX data connection for the 2-channel DMX personality.
· Refer to the Introduction chapter for a brief description of each DMX personality.
· Refer to the Operation chapter to learn how to configure the Amhaze™ Studio to work in these personalities.
· The DMX Values section provides you with detailed information regarding the DMX personalities.

📝 **If you are not familiar with or need more information about DMX standards, Master/Slave connectivity, or the DMX cables needed to link this product to a DMX controller, download the DMX Primer from the Chauvet website: www.chauvetprofessional.com.**

Mounting Before mounting this product, read and follow the Safety Notes. For our CHAUVET® Professional line of mounting clamps, go to http://trusst.com/products/.

Orientation Always mount this product in a safe position and 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.
· The product is not intended for permanent installation.
· 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 Technical Specifications for the weight-bearing requirements of this product.
· When hanging this product, always secure to a fastening device using a safety cable. For our CHAUVET® Professional line of safety cables, go to http://trusst.com/products/.

Procedure The Amhaze™ Studio has a threaded mounting hole, size M12, 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 our CHAUVET® Professional line of mounting clamps, go to http://trusst.com/products/.

Floor Mounting   **Overhead Mounting**
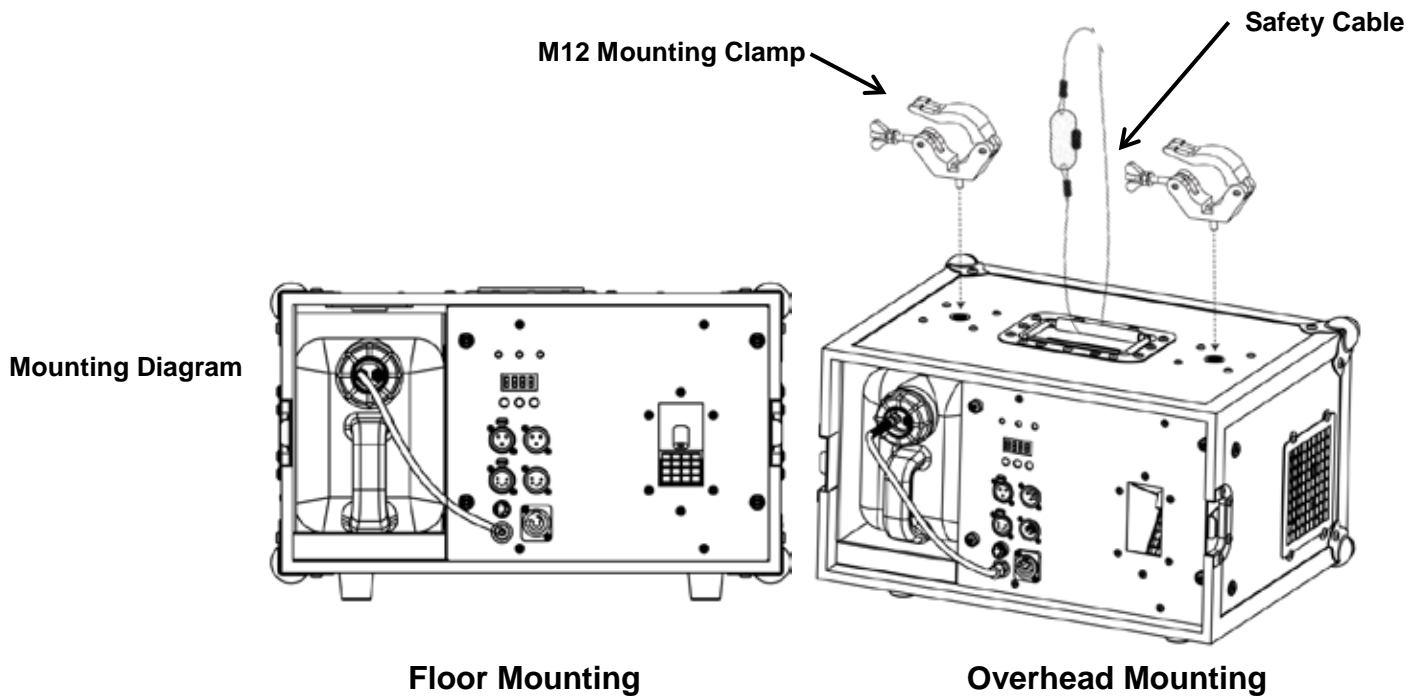
Storage Before storing this product, be sure that the fluid container is placed inside the product correctly with the cap facing up.
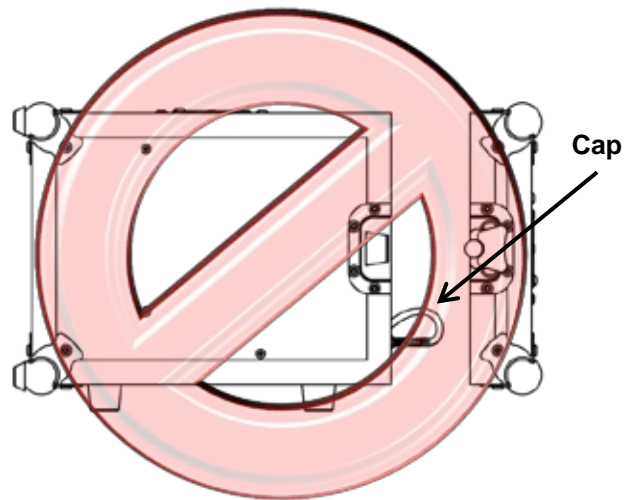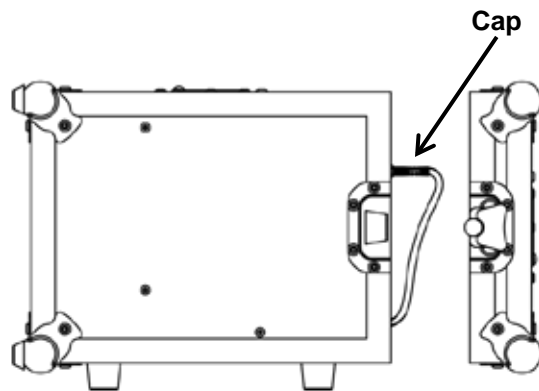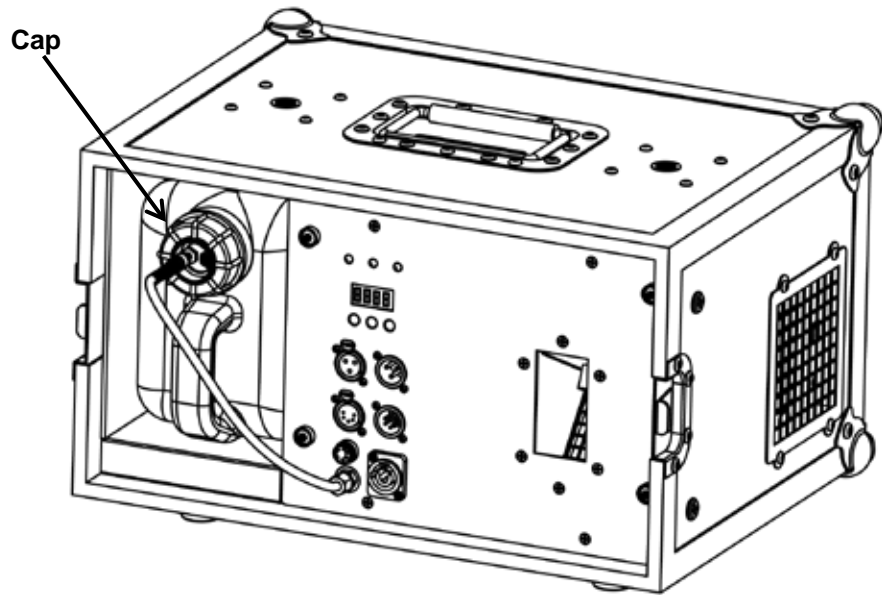
4. OPERATION

Control Panel Description

Button	Function
<MENU>	Exits/chooses from the current menu or function
<UP>	Navigates upward through the menu list or increases the numeric value when in a function
<DOWN>	Navigates downward through the menu list or decreases the numeric value when in a function

Control Options

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

Programming

Refer to the Menu Map to understand the menu options. The menu map shows the main level and a variable number of programming levels for each option.
- To go to the desired main level, press **<MENU>** repeatedly until the option shows on the display. This will take you to the first programming level for that option.
- To select an option or value within the current programming level, press **<UP>** or **<DOWN>** until the option shows on the display.
- Press **<MENU>** repeatedly to exit to the previous main level.

Preparing for Operation

To prepare the Amhaze™ Studio for operation, perform the following steps:
1. Open the flight case.
2. Withdraw the fluid tank from its compartment and remove its cap.
3. 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. Connect the hazer to power. After approx. 4 minutes, the machine is ready to output haze.

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

DMX 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™ Studio 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.chauvetprofessional.com.

To select the starting address, do the following:
1. Go to the **d** main level.
2. Select a DMX Value **001–512**.

Fan Control

This setting adjusts the fan speed.
1. Go to the **F** main level.
2. Select **000–005**.

Haze Volume

This setting adjusts the haze volume.
1. Go to the **h** main level.
2. Select **000–005**.

Menu Map

Main Level	Programming Levels	Description
d	001–512	Selects the DMX starting address
F		Fan speed control
h	000–005	Haze volume control

DMX Values

2Ch	Channel	Function	Value	Percent/Setting
	1	**Fan Speed**	000❻005 006❻255	No function Fan speed (slow to fast)
	2	**Haze Volume**	000❻005 006❻255	No function Haze volume 1-100%

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.
3. 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 empty.
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™ Studio. 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™ Studio on a monthly basis to achieve the best performance.

6. TECHNICAL SPECIFICATIONS

Dimensions and Weight	Length	Width	Height	Weight
	17.75 in (451 mm)	15.82 in (402 mm)	10.78 in (274 mm)	34.4 lb (15.7 kg)

Note: Dimensions in inches rounded to the nearest decimal digit.

Power	Power Supply Type	Range	Voltage Selection
	Model-specific	120 VAC, 60 Hz or 230 VAC, 50 Hz	Fixed

	Parameter	120 V, 60 Hz	230 V, 50 Hz
	Consumption	700 W	250 W
	Operating current	6.2 A	5 A
	Fuse	7 AL	7 AL

	Power	U.S./Canada	Worldwide
	Power input connector	Neutrik® powerCON® A	Neutrik® powerCON® A
	Power cord plug	Edison (U.S.)	Local plug

Operation/Capacity/ Consumption	Heat-up Time	Tank Capacity	Fluid Consumption
	4 min	0.85 gal (3.2 l)	18 ml/min

Misc.	Output
	1,700 cfm

Thermal	Max. External Temperature	Cooling System
	104 °F (40 °C)	Fan-Assisted Convection

DMX	I/O Connectors	Connector Type	Channel Range
	3- and 5-pin XLR	Sockets	2

Ordering	Product Name	Item Code	UPC Number
	Amhaze™ Studio (120 V)	05070936	781462212841
	Amhaze™ Studio (230 V)	05070937	781462212858

CE   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
- The 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).**

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