SM250

User Manual

TABLE OF CONTENTS

1. BEFORE YOU BEGIN

What Is Included

- SM250
- Power Cord
- Wired Timer Remote

- Hanging Bracket with Mounting Hardware
- Warranty Card
- Quick Reference Guide

Unpacking Instructions

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

Claims

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

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

Text Conventions

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

Symbols

SYMBOL	MEANING
⚡	Electrical warning. Not following these instructions may cause electrical damage to the product, accessories, or the user.
⚠	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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Product at a Glance

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

Safety Notes

- Not intended for permanent installations.
- Always connect the product to a grounded circuit to avoid the risk of electrocution.
- Always disconnect this product from the power source before cleaning it or replacing the fuse.
- Make sure the power cord is not crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- If mounting this product overhead, always secure it to a fastening device using a safety cable.
- Do not mount this product on a flammable surface (e.g., wood, linoleum, carton, plastic, or carpet).
- Make sure there are no flammable materials close to the unit while operating.
- Do not touch the output nozzle on this product.
- Do not drink the snow fluid. If you do, call your local emergency service (911 in the US) for help.
- Do not add perfume, alcohol, gasoline, or any other flammables to the snow fluid.
- In certain environments, snow fluid-based machines may leave a slippery residue on floors and surfaces.
- Use only CHAUVET® DJ water-based snow fluid.
- Drain the tank before transporting the product.

- Always make sure that the voltage of the outlet to which you are connecting the product is within the range stated in the decal or rear panel of the product.
- This product is for indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture.
- Always install this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Be sure that no ventilation slots on the unit's housing are blocked.
- Never connect this product to a dimmer or rheostat.
- 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 this product at higher temperatures.
- In the event of a serious operating problem, stop using the product immediately.
- Never try to repair this 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

LED Display

Menu Buttons

Wired Controller In

Wireless Receiver In

Blower Speed Switch

Power Switch

Fluid Tank

Fluid Level Indicator

DMX In/Out

Power In

Fuse Holder

Product Dimensions

13.5 in
344 mm

13.9 in
355 mm

17.6 in
449 mm
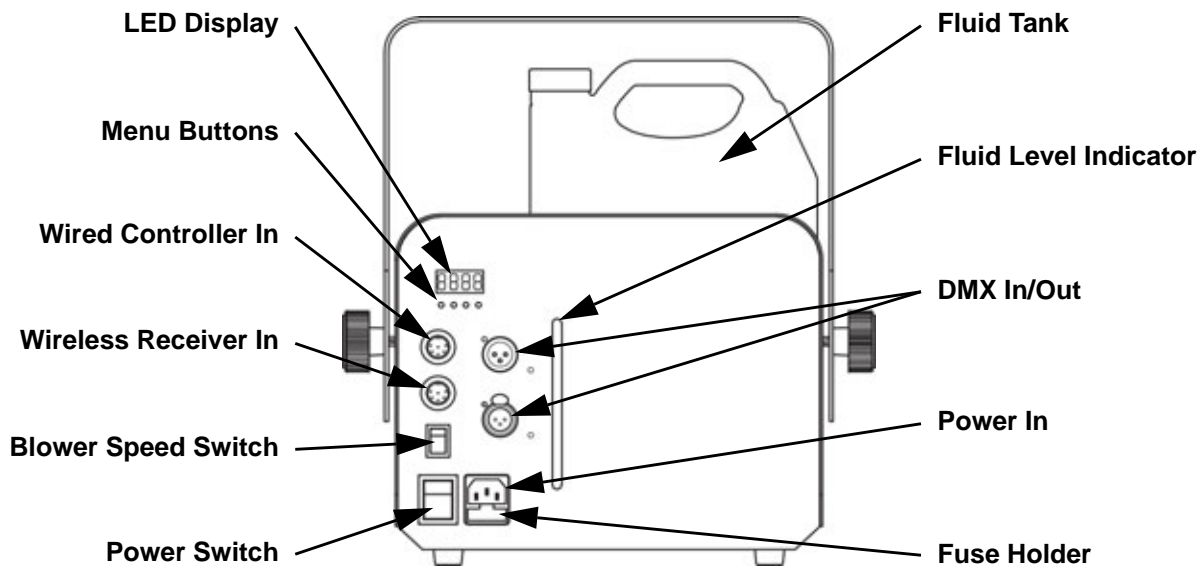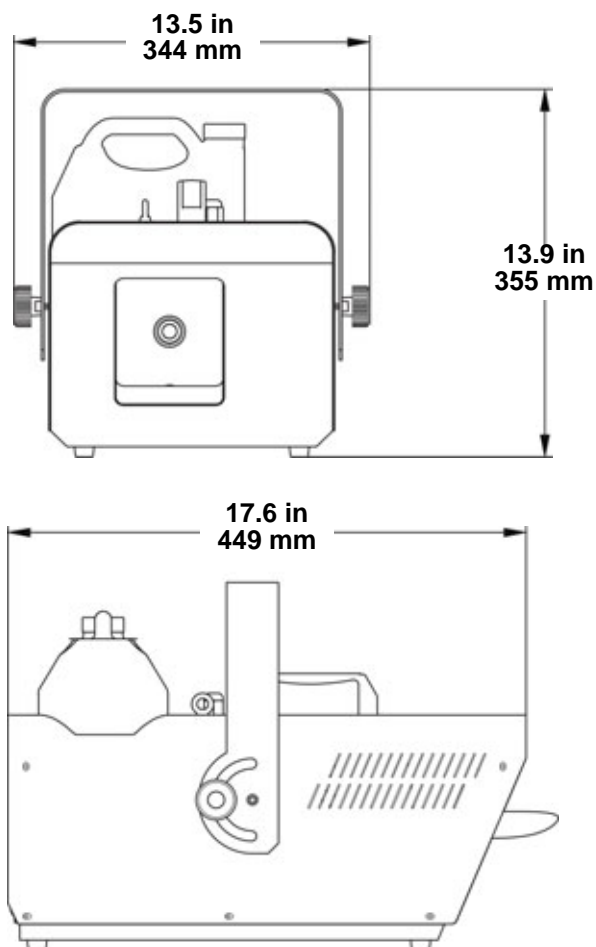
3. SETUP

AC Power

The SM250 has a fixed voltage power supply and it can work with an input voltage of 120 VAC, 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. Wedge the tip of a flat-head screwdriver into the slot of the fuse holder.
2. Pry the fuse holder out of the housing.
3. Remove the blown fuse from the holder and replace with a fuse of the exact same type and rating.
4. Insert the fuse holder back in place and reconnect power.

Installed fuse
(held by plastic clip)

Spare fuse holder
(inside safety cap)

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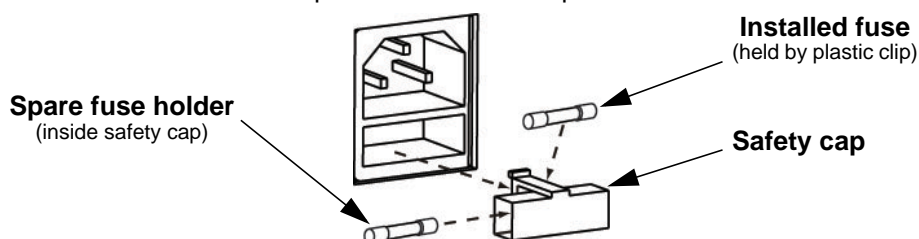
Disconnect the product from the power outlet before replacing the fuse.

Mounting

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

Orientation

⚠ **This product may NOT be tilted. This product should be level when on a surface or when mounted.**

Rigging

- Before deciding on a location, always make sure there is easy access to the product for maintenance and fluid replenishment.
- Make sure adequate ventilation is provided around the product.
- Make sure that the structure or surface onto which you are mounting the product can support the product's weight. (see the Technical Specifications)
- When mounting the product overhead, always use a safety cable. Mount the product securely to a rigging point, such as an elevated platform or a truss.
- When rigging the product onto a truss, you should use a mounting clamp of appropriate weight capacity. The bracket has 13-mm holes, which are appropriate for this purpose.
- The rubber feet also serve as floor supports and allow for surface mounting. When mounting the product on the floor, make sure that the product and cables are away from people and vehicles.

Mounting Diagram

Mounting Clamp
(such as **CLP-15** or **CLP-15N** from Chauvet)

Mounting Bracket

Safety Cable
(such as **CH-05** from Chauvet)

Bracket Adjustment Knob

Sock
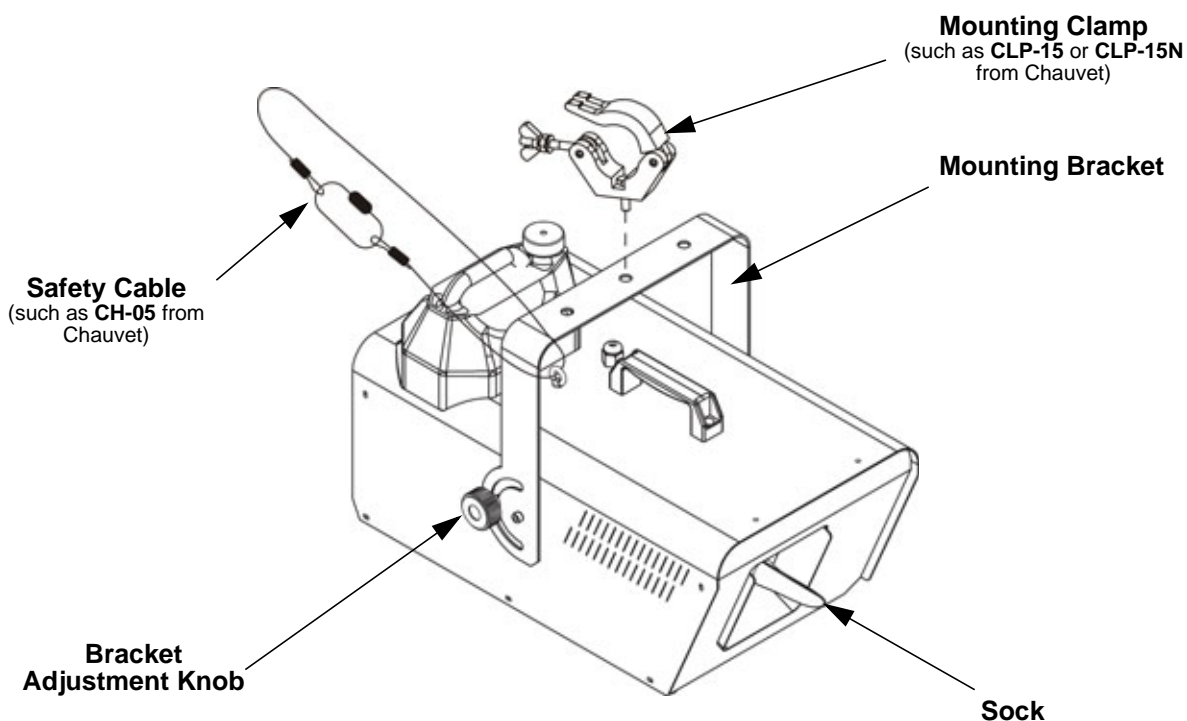
ⓘ **While operating the SM250, make sure there is adequate snow fluid in the machine to prevent pump damage. When the snow fluid level becomes low, simply add more snow fluid to continue using the SM250.**

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>	Press to find an operation mode or to back out of the current menu option
<UP>	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
<ENTER>	Press to activate a menu option or a selected value

Menu Map

PROGRAMMING LEVELS		DESCRIPTION
Addr	d 1–512	DMX starting address
SnoU	S 0–3	Standalone snow output

Configuration (DMX)

The SM250 works with a DMX controller. Information about DMX is in the CHAUVET DMX Primer, which is available from the Chauvet website http://www.chauvetlighting.com/downloads/DMX_Primer_rev05_WO.pdf.

Starting Address

When selecting a starting DMX address, always consider the number of DMX channels the selected DMX mode uses. If you choose a starting address that is too high, you could restrict the access to some of the product's channels.

The SM250 uses 1 DMX channel, which defines the highest configurable address as **512**.

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

To select the starting address, do the following:

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

DMX Channel Assignments and Values

CHANNEL	FUNCTION	VALUE	PERCENT/SETTING
1	Snow Volume	000 ⇔ 010	No function
		011 ⇔ 255	Snow volume, low to high

Remote Operation

The SM250 can be operated with the included wired timer controller (FC-T).Additionally, the product can be operated with the FC-W wireless remote, available separately.

Wired Timer Remote Setup

The Wired Timer Remote allows you to automatically trigger snow output by setting output, interval time, and duration time. LED indicator lights display the machine and controller's current state. Rotary knobs set interval, output, and duration times, while manual and continuous buttons allow overriding control.

1. Plug in the snow machine to power.
2. Plug in the wired timer controller to the Wired Remote socket on the back of the snow machine. (See the Product Overview.)

Wired Timer Remote Overview

INTERVAL Knob

DURATION Knob

OUTPUT Knob

MANUAL Button

TIMER ON/OFF Button

CONTINUOUS Button
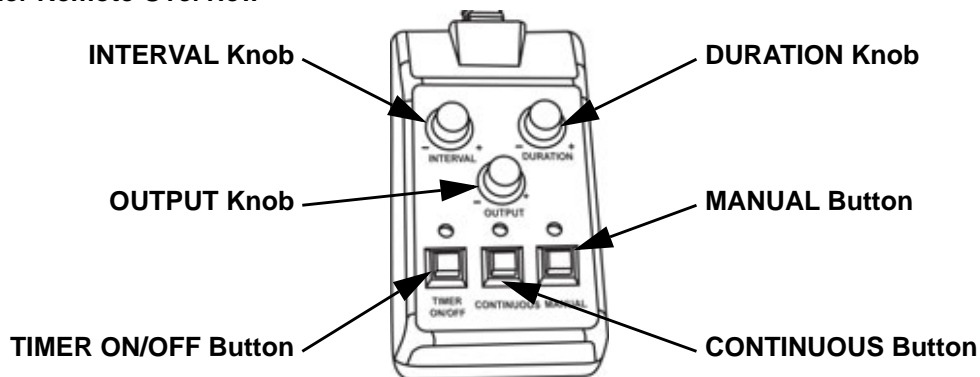
Wired Timer Remote Operation

The Wired Timer Remote has three modes of operation: timer, continuous, and manual.

Timer Mode

To trigger the SM250 with the timer function, follow the instructions below:

1. Set the desired output level with the **OUTPUT** knob.
2. Set the **INTERVAL** and **DURATION** knobs to the desired positions.
    *   The **INTERVAL** knob sets the amount of time in between bursts of snow.
    *   The **DURATION** knob sets the length of time that the snow machine will run during the burst.
3. Press the **<TIMER ON/OFF>** latching button. The LED indicator above the button will light up. The timer will now run as set by the **INTERVAL**, **DURATION**, and **OUTPUT** knobs.
4. Press the **<TIMER ON/OFF>** button again to turn off the timer.

> (i) **The MANUAL Button will override the timer function.**

Continuous Mode

To trigger the SM250 to continuously cycle snow, follow the instructions below:

1. Set the desired output level with the **OUTPUT** knob.
2. Press the **<CONTINUOUS>** latching button. The LED indicator above the button will light up. The snow machine outputs snow until the **<CONTINUOUS>** button is pressed again.
3. Press the **<CONTINUOUS>** button again to stop the snow output.

> (i) • **The duration of Continuous snow output is based on the capacity of the tank.**
> • **Fluid consumption will be significantly increased during Continuous mode.**

Manual Mode

To trigger the SM250 manually, do the following:

1. Set the desired output level with the **OUTPUT** knob.
2. Press and hold the **<MANUAL>** button on the Wired Timer Remote. The LED indicator above the button will light up. The snow machine will output snow for as long as you hold down the **<MANUAL>** button.
3. Release the **<MANUAL>** button to stop the snow output.

Optional Wireless Remote (FC-W)

The optional FC-W wireless remote allows the user to trigger the SM250 to produce snow from up to 100 ft away.

1. Plug in the snow machine to power.
2. Plug the FC-W wireless remote receiver into the Wireless Receiver socket on the back of the SM250. (See the Product Overview.)
3. Press and hold the **<1>**, **<2>**, **<3>**, or **<4>** button on the wireless remote. (Download the FC-W User Manual from www.chauvetdj.com for more information on addressing the FC-W)
4. Release the button to stop the snow output.

FC-W Wireless Remote Overview
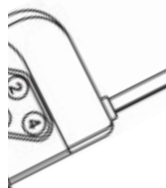
> • **Ensure the FC-W has an unobstructed view of the receiver for maximum performance.**
> • **The <2>, <3>, and <4> buttons are reserved for future use.**

Standalone Operation

The SM250 can be operated without a controller through the options in the menu.

To trigger the SM250 to output snow without a controller:

1. Press **<MENU>** repeatedly until **SnoU** shows on the display.
2. Press **<ENTER>**.
3. Use **<UP>** or **<DOWN>** to increase or decrease the snow output volume, from **S 0–3**.
4. Press **<ENTER>**.

5. MAINTENANCE AND STORAGE

Snow Machine Maintenance

Do not allow the snow machine to become clogged. After every 40 hours of continuous operation, use clean water through the system to prevent the accumulation of particulate matter in the pump.

The recommended cleaning procedure is as follows.

1. Unplug the product from power.
2. Empty all snow fluid from the machine.
3. Add clean water 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 snow fluid to continue using the snow machine. Run the machine briefly to clear any remaining water from the pump.

Do Not operate the machine without fluid at any time.

Storage

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

Test-run your SM250 on a monthly basis to achieve the best performance.

6. TECHNICAL SPECIFICATIONS

Dimensions and Weight

LENGTH	WIDTH	HEIGHT	WEIGHT
17.6 in (449 mm)	13.5 in (344 mm)	13.9 in (355 mm)	20.2 lb (9.2 kg)

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

Power

POWER SUPPLY TYPE	RANGE	VOLTAGE SELECTION
Fixed	120 VAC, 60 Hz	Fixed

PARAMETER	120 V, 60 Hz
Consumption	1650 W
Operating Current	13.5 A
Fuse	F 15 A, 250 V

POWER I/O	U.S./WORLDWIDE	UK/EUROPE
Power input connector	IEC	IEC
Power Cord plug	Edison (U.S.)	Local Plug

Operation

TANK CAPACITY	FLUID CONSUMPTION
1.3 gal (5 l)	580 ml/min

Thermal

MAXIMUM EXTERNAL TEMPERATURE	COOLING SYSTEM
104 °F (40 °C)	Convection

DMX

I/O CONNECTOR	CHANNEL RANGE
3-pin XLR	1

Ordering

PRODUCT NAME	ITEM CODE	UPC NUMBER
SM250 (120 V)	09071210	781462215583

RoHS

CE
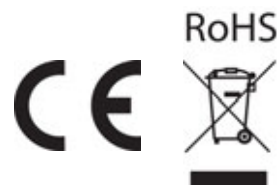
RETURNS

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 www.chauvetdj.com 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 www.chauvetdj.com 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

World Headquarters	
General Information	**Technical Support**
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Voice: (954) 577-4455	Email: chauvetcs@chauvetlighting.com
Fax: (954) 929-5560	**Website**
Toll Free: (800) 762-1084	www.chauvetlighting.com
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Visit the applicable website above to verify our contact information and instructions to request support. Outside the U.S., United Kingdom, Ireland, Mexico or Benelux, contact the dealer of record.