

SM-250

User Manual




CHAUVET **2**

Edition Notes

The SM-250 User Manual includes a description, safety precautions, installation, programming, operation and maintenance instructions for the SM-250 as of the release date of this edition.

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Document Printing

For best 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 the printer to scale the content accordingly.

Intended Audience

Any person 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.

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Document Revision

This is revision 1 of the SM-250 User Manual. Go to www.chauvetdj.com for the latest version.

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1. Before You Begin

What Is Included

- SM-250
- Power cable
- FC-T Timed Remote Control
- 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	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.

Safety Notes

These Safety Notes include important information about installation, use, and maintenance of the SM-250.



- **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.
 - ◆ Use Chauvet fluids.
 - ◆ Drain the tank before transporting or storing the product.
 - ◆ Keep the machine level.
 - ◆ Clean the machine after every use.
 - ◆ Clean around the product during and after use, as surfaces may become slippery.



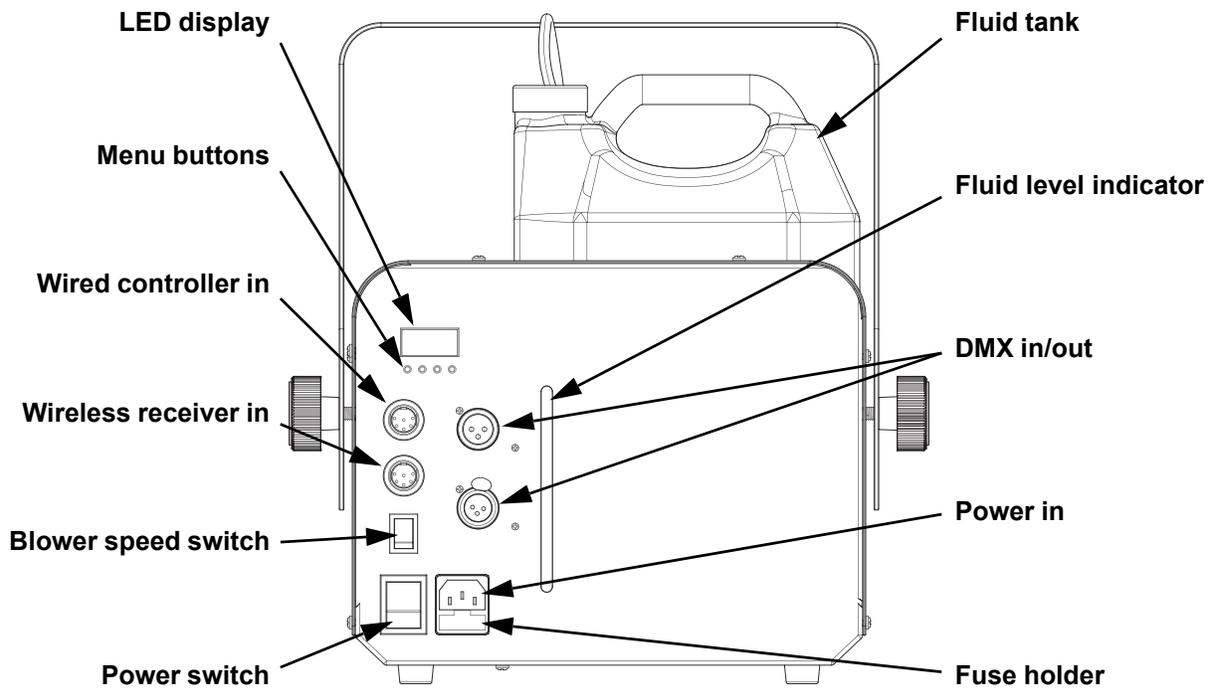
- In the event of a serious operating problem, stop using immediately.
- **DO NOT:**
 - ◆ Open this product or attempt any repairs. It contains no user-serviceable parts.
 - ◆ Use if the power cable is crimped or damaged.
 - ◆ Disconnect by pulling on the power cable.
 - ◆ Allow flammable materials close 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 cable.
 - ◆ 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.
 - ◆ Submerge.
 - ◆ Set this product on a flammable surface.
 - ◆ Touch the output nozzle. It may be hot for several hours after use.
 - ◆ Drink the fluid.
 - ◆ Add perfume, alcohol, gasoline or any other chemical to the fluid.
 - ◆ Use for space-heating purposes.
 - ◆ Overfill.



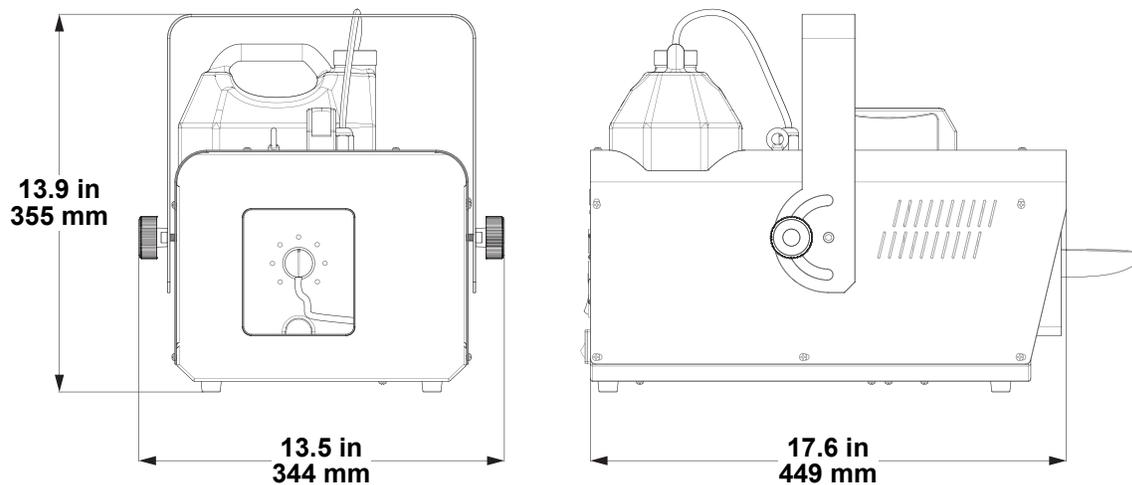
Keep this User Manual for future use. If the product is sold to someone else, be sure that they also receive this document.

2. Introduction

Product Overview



Product Dimensions



3. Setup

AC Power

The SM-250 has a fixed voltage power supply, and it can work with an input voltage range of either 120 VAC, 60 Hz or 230 VAC, 50 Hz, depending on the specific model.

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.



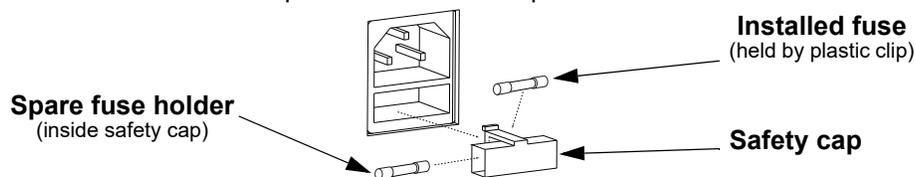
- **Always connect the product to a protected circuit (a circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.**
- **To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product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

Mounting

Before mounting the product, read and follow the safety recommendations indicated in the [Safety Notes](#).

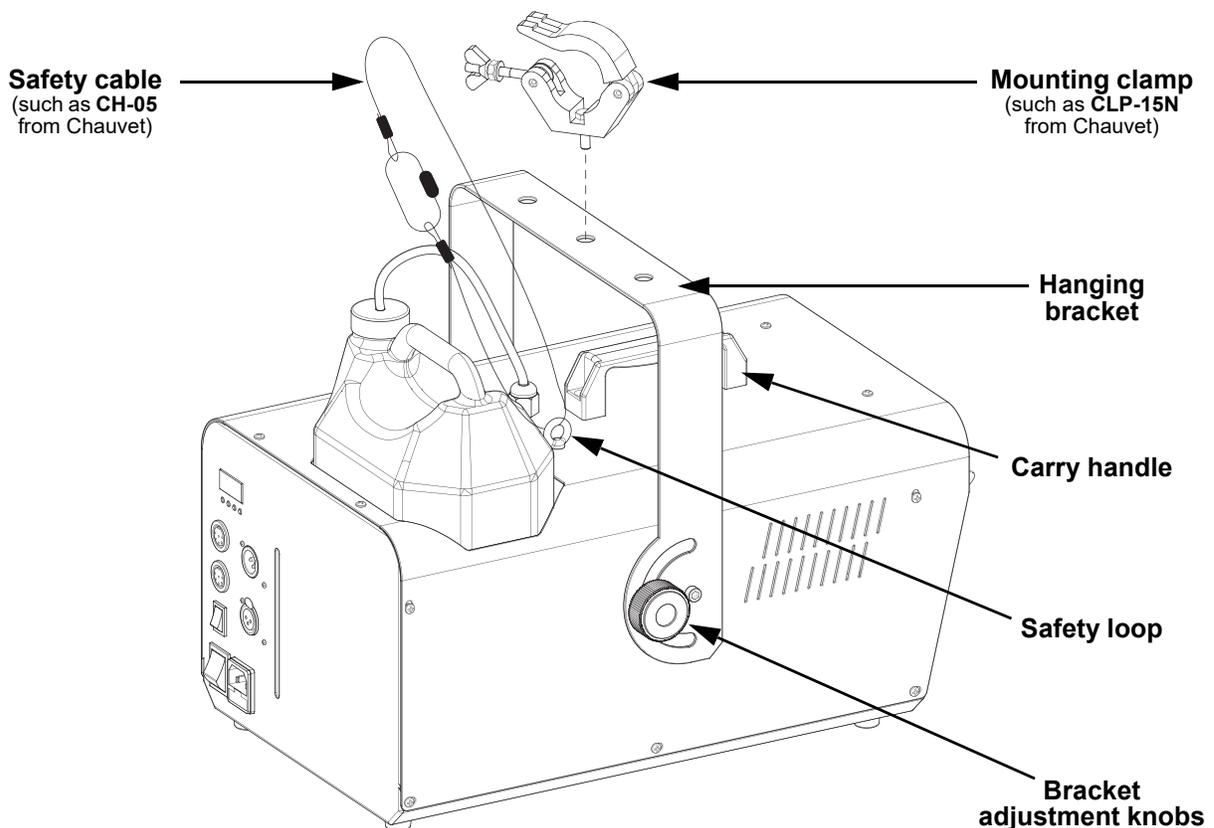
Orientation

The SM-250 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 [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, 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.
- When mounting the product on the floor, make sure that the product and cables are away from people and vehicles.

Mounting Diagram



While operating the SM-250, 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 SM-250.

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

Refer to the SM-250 product page on www.chauvetdj.com for the latest menu map.

Mode	Programming Levels		Description
DMX	Addr	d 1–512	DMX address
Standalone	SnoU	S 0–3	Standalone snow output

DMX Configuration

The SM-250 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.

Starting Address

The SM-250 uses 1 DMX channels in DMX mode, which defines the highest configurable address to **512**. For information about 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 ↔ 063	No function
		064 ↔ 255	Snow volume, low to high

Standalone Configuration

Set the product in standalone mode to operate without a 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.

To run the SM-250 in standalone mode, follow the instructions below.

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

Remote Configuration

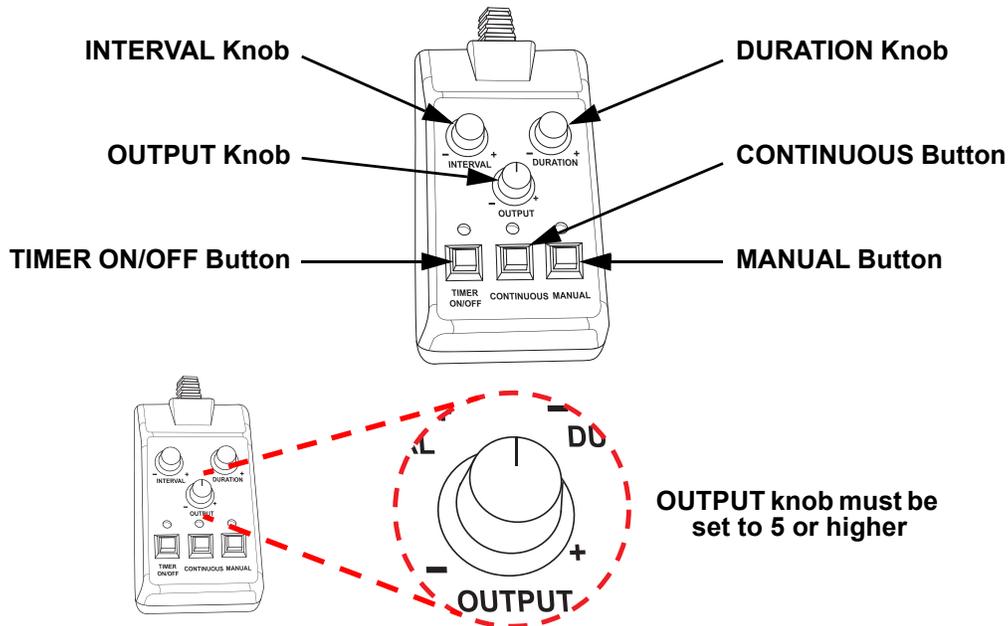
The SM-250 operates with the included wired timer controller (FC-T). The product also operates with the FC-W wireless remote, available separately.

Wired Timer Remote Setup

The Wired Timer Remote (FC-T) allows automatic snow output triggering. LED indicators display the current state of the product and the controller. Rotary knobs set interval, output, and duration times, whereas manual and continuous buttons allow overriding control.

1. Plug the product in to power.
2. Plug the FC-T in to the wired controller socket on the back of the product. (See the [Product Overview](#).)

Wired Timer Remote Overview



Wired Timer Remote Operation

The FC-T has three modes of operation: timer, continuous, and manual.

Timer Mode

To operate the SM-250 with the timer function, follow the instructions below:

1. Set the desired output level with the **OUTPUT** knob (No output below level 5).
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.
4. Press the <TIMER ON/OFF> button again to turn off the timer.



- The **MANUAL** Button will override the timer function.
- No output until level five on output knob

Continuous Mode

To trigger the SM-250 to continuously cycle snow, follow the instructions below:

1. Set the desired output level with the **OUTPUT** knob (No output below level 5).
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.



- 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 SM-250 manually with the FC-T, do the following:

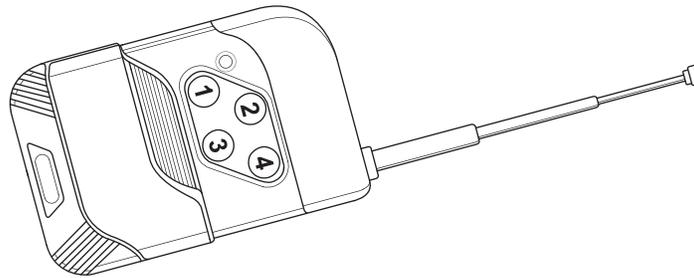
1. Set the desired output level with the **OUTPUT** knob (No output below level 5).
2. Press and hold the **<MANUAL>** button on the FC-T. The LED indicator above the button will light up. The snow machine will output for the duration of the button press.
3. Release the **<MANUAL>** button to stop the snow output.

Optional Wireless Remote (FC-W)

The optional FC-W wireless remote can trigger the SM-250 to produce snow from up to 100 ft away.

1. Plug the product in to power.
2. Plug the FC-W wireless remote receiver into the wireless receiver socket on the back of the SM-250. (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.

5. Maintenance

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 SM-250.** Cleaning the system prior to storage will help prevent any particles from condensing inside the pump while not in use.



Test-run the SM-250 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 are rounded.

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	1,650 W	1,000 W
Operating Current	13.5 A	4.1 A
Fuse	F 15 A, 250 V	F 15 A, 250 V
Power I/O	U.S./Worldwide	UK/Europe
Power input connector	IEC	IEC
Power cable 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
SM-250 (120 V)	09071210	781462215583
SM-250 (230 V)	09072213	781462225612



Contact Us

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