Snow Squall Snow Machine

Polar Vortex Snow Machine

Operators Manual

ultratec special effects

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Introduction

Embodied by a one-piece heavy-duty polymer plastic casing, the Snow Squall has a 110V - 13 Amp industrial blower or a 220V – 7 Amp industrial blower. The Polar Vortex has a 220V – 13 Amp industrial blower.

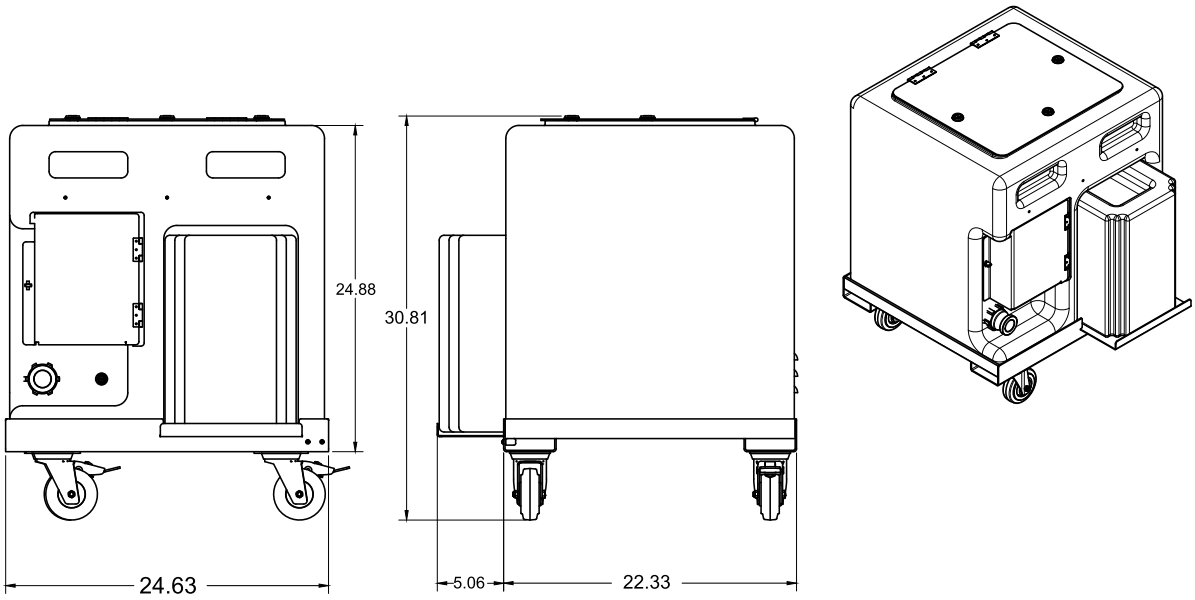
Hidden backstage, when piped to the included 7 Meter hose (27 feet), the Snow Squall can push artificial snow up to 30 feet. The Polar Vortex can push artificial snow up to 50 feet. Once installed, the snow nozzle remains hidden in the scenery showering snow over the desired area. Maximize the snow effect area by attaching the nozzle to our Swivel Bracket.

Two different snow nozzles are provided allowing the user to create large or small artificial snowflakes. When not in use, lift the top lid and easily store the hose and snow nozzles in the hidden compartment.

Warning

1. Keep this device dry to prevent danger of electric shock.
2. Use grounded electrical outlets only.
3. Always unplug the machine when you are handling any fluids around this machine.
4. Turn off power when not in use.
5. For adult use only. Snow machine must be installed out of the reach of children.
6. Never leave the unit running unattended.
7. Do not aim output nozzle directly at anyone.
8. Locate the snow machine in a well-ventilated area.
9. Never cover the unit's vents – to ensure adequate ventilation allow a free air space of at least 1" around the unit.
10. Never add flammable liquids (oils, gasses, or scent) to the snow fluid.
11. Use only Ultratec Special Effects Snow Fluid.
12. Always make sure there is sufficient fluid in the bottle (4L / 20L Fluid Container) to prevent damage to the pump.

Technical Drawings



Technical Specifications

Length:	27.39 in /69.6 cm
Width:	24.63 in /62.56 cm
Height:	30.81 in /78.26 cm

Polar Vortex Snow Machine

Net Weight:	150 lbs /68 kg
Power Cord:	6 ft - 1.8 m interconnect cord
Rating:	13 Amp 220 volts @ 50/60 hz.
Regulatory Compliance:	This product has been certified to CSA/UL

Snow Squall Snow Machine

Net Weight:	125 lbs / 57 kg
Power Cord:	6 ft - 1.8 m interconnect cord
Rating:	13 Amp 120 volts @ 50/60 hz 7 Amp 220 volts @ 50/60 hz.
Regulatory Compliance:	This product has been certified to CSA/UL

Operating Procedure

Setup

1.) Remove hose and power cable from the top storage compartment.

2.) Attach supplied power cable to the “Power In” Connector, located on the control panel, by inserting and twisting the connector clockwise until it locks.

3.) When using a 20 liter container, slide out the fluid tray, located to the right of the control panel. Alternately, the tray can store 2- 4 liter jugs without sliding out.

4.) Open the snow fluid jug and insert the pickup tube from the snow machine into the jug.

5.) Set the jug onto the fluid tray.

6.) Attach air hose and fluid tube to the snow machine. This is achieved by attaching the air blower tube to the blower outlet and rotating the cam lock arms to secure. The fluid tube is pushed into the push lock fitting, disconnect the 4 mm tubing by pressing in the collar and pulling the tubing straight out.

Nozzle setup

7.) Attach air hose and fluid tube to the snow nozzle.
This is achieved by attaching the air hose to the nozzle inlet and rotating the cam lock arms to secure. The fluid tube is pushed into the push lock fitting, disconnect the 4 mm tubing by pressing in the collar and pulling the tubing straight out.
Mount the nozzle in the desired location

Operation

Standard Remote (Optional Accessory)

The fluid pump rate is fully adjustable and the blower settings are On/OFF.

The remote has an On/Off switch with power LED and two flow control knobs. It plugs into the front of the machine.
The remote may be extended with a 200’ cable.

Turning the Snow remote On/Off switch to the ON position will active the snow machine based on the dial settings.
Turning the Snow remote On/Off switch to Off will turn off both the blower and fluid pump.

The first knob has a cloud illustration and controls the air ON/OFF. The blower starts when the knob is turned to more than 50%.

Fluid output is controlled by the second knob, which is denoted with a snowflake. A range of flake size, and distances can be achieved by adjusting the controls.

For further flake size reference, see Snow Flake Size Chart later in this manual.

DMX Operation

If the DMX control is used, the remote does not need to be installed.
DMX control data can also start the blower and vary fluid flow.
The base DMX address is set on the front of the machine.
The base DMX address controls the air speed and will start the blower when a signal greater than 50% is applied.
The base address +1 controls the fluid output rate. Do not set the base DMX address above 511.

Note: DMX address must be set to 001 for remote to operate.

Snow Flake Size Chart

The Polar Vortex and Snow Squall machines come provided with 2 different Air Nozzles and 2 Different Snow Socks. Different combinations of Nozzle and Sock will provide a variety of snow effects. It is important to note that the larger the Snow Flakes the less distance they will travel.

Flake Size Throw Distance	Nozzle 1	Nozzle 2	Sock 1	Sock 2
Small Flake Long Distance	✔		✔	
Medium/Large Flakes Long Distance	✔			✔
Large Flake Medium Distance		✔		✔
Medium Flake Medium Distance		✔	✔	

Nozzle 1 has 16 x 0.188" Holes around the outside, this nozzle produces the smallest flakes

Nozzle 2 has 8 x 0.25" Holes around the outside,this nozzle Produces the largest flakes

Snow Sock 1 is made of Polyester and has a finer mesh, this produces smaller flakes

Snow Sock 2 is made of Corduroy, this produces larger chunky flakes of snow

Maintenance

1.) Do not allow the machine to run out of fluid. The fluid pump is subject to burn out if run dry for any period of time.
2.) Take care when priming the pump when changing jugs.
3.) Keep the air intake ports on the bottom of the chassis free from blockage.
4.) With time the sock may accumulate residue, which will impede performance. Running clear water through the machine and rinsing off the sock will restore performance.
5.) After each event flush the unit with 2L of clear water.
6.) Protect the unit from freezing. In extreme cold, performance will be reduced.
7.) Do not allow the snow liquid to become contaminated. Always replace the caps on the snow liquid container and the snow machine liquid tank immediately after filling.
8.) Before storing, flush out system with clean water.
9.) If you experience low output, mechanical noise or no output at all, unplug immediately. Check fluid level, the remote connection, and power source. The blower is equipped with an internal thermal overload protection device, this will self reset when the motor cools. If all of the above appear to be okay, plug the unit in again. If snow does not come out after 30 seconds, check the hose attached to the tank to make sure there is fluid going through the hose.

Exterior
To clean, wash with mild soap and warm water.

Recommended Fluids

True North Snow Fluid: The secret to creating realistic-looking snow is in the fluid. Extensive research when into creating the best possible snow fluid that is odourless and environmentally safe.

Ultimate Extra Dry Snow Fluid: Retaining the same snow properties as our popular True North Snow Fluid, this extra dry solution is perfect for a densely moist and humid environment.

Concentrated Snow Fluid: Available in a 410ml bottle, this Snow Fluid Concentrate is ideal for cost effective transportation and minimizing storage space without compromising quality.

True North Extreme: The True North Extreme Snow Fluid evaporates very quickly. This snow fluid is recommended for well ventilated environments and great for outdoor venues.

Warranty

Hardware products come with a five-year warranty on parts and labor. If the unit in question has a material defect or fault that is caused in manufacturing, Ultratec Special Effects will provide free parts and labor to remedy the equipment. Ultratec Special Effects service department must be advised in a timely manner after defect appearance and the date of warranty request must be within five years of sale/purchase. Proof of sale and/or proof of purchase will be required for warranty to take effect.

Warranty service will be performed as follows: faulty parts will be repaired or replaced with the same or comparable parts, based on availability. Freight to our facility for warranty requests will be prepaid by the user/dealer. Upon completion of the repair, Ultratec Special Effects will return the unit via the most economical means available. Should you require the item express-returned, the user/dealer is responsible for indicating this request and for any difference in freight cost.

Warranty will be voided, and customer will lose all rights guaranteed by the warranty if any of the following are observed/occur:
If any non Ultratec Special Effects fluid is used at any point of operation.
If any adjustments or repairs are done to the machine in question by repair technicians not authorized by Ultratec Special Effects.
If our repair technicians observe any signs of incorrect handling/treating of machine in question.

Warranty services do not cause an extension of the warranty nor does a repaired product start a new warranty. This warranty only applies to the product supplied by Ultratec Special Effects, Ultratec Special Effects is not responsible for any losses, costs, or damages from the use of a defective product.

Any additional costs incurred are the responsibility of the Dealer and/ or the customer.
An RA (Return Authorization) number must be noted on the outside of each box being returned to our facility. Any package(s) without an RA number clearly marked, will not be accepted by our receiving department.

Export Distributors are required to carry out the warranty repair, parts will be supplied by Ultratec.

Please do not forget to remove any liquid from the machine when sending in for repair.

Please remember to include the RA Number on all items being shipped in for repairs.
To request a Return Authorization number please refer to our website - instructions below:
1) www.ultratecfx.com
2) Click on the SUPPORT tab along the top of the screen
3) Click on REQUEST RMA from the pull down
4) Fill in the required information
5) Click on "SEND" button
If you have any questions or require assistance please contact service at 519-951-3355/866-534-5557 or by email at Service@Ultratecfx.com.

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