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CLOUD 9 SMOKER USER GUIDE

030402



SUPER VAC
THE VENTILATION SPECIALISTS

The CLOUD 9 SMOKER

User Guide

P/N

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This manual covers the description, warnings, cautions, operation and maintenance of the
Super Vac Cloud 9 Smoker

**Please take the time to read this manual before operating the smoker.
Save this guide for future reference.**

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1. BREAKAGE OR DAMAGE DURING SHIPMENT

The transportation company is fully responsible for all shipping damage and will resolve problems promptly if you handle it correctly. Please read these instructions carefully.

Examine the contents of all shipping cases. If you find any damage, call your transportation agent at once and have them make a description on the freight or express bill describing the damage and the number of pieces. Then write us and we will send you the original bill of lading. Get a claim blank from the express or truck company. Fill the claim form out. Attach the claim blank to the original bill of lading together with a copy of our invoice. Attach a memo on which you show the value of the damaged goods. Mail or hand these papers to your local transportation agent. They will process your claim with reasonable promptness.

Please note, we cannot and will not enter claim for damages. If we filed claim here, it would be sent to your local freight agent for verification and investigation. This time can be saved by your filling the claim directly. Every consignee is on the ground floor and in contact with the local agent who inspects the damaged goods and thus, each claim can be given individual attention.

Since our goods are packed to comply with the regulations of all railroad, truck and express companies, we cannot allow deduction from any invoice because of any damage, however, be sure to file your claim promptly. Our goods are sold F.O.B. factory. We take receipt from the transportation company certifying that the goods were delivered to them in good order, and our responsibility ceases.

It is seldom that any breakage or damage occurs in any of our shipments, and in no case will the customer be out any expense if they follow the above instructions.

Be sure to keep all damaged goods subject to examination of the truck or express company inspector, who may call on you some time later. These damaged goods, of course, will belong to them, and they will inform you what to do with them. If you dispose of these damaged goods, your claim may not be paid.

2. INTRODUCTION

Congratulations for purchasing the Super Vac Cloud 9 Smoker. We hope it will bring you long hours of satisfaction.



Please carefully and completely read the following instructions for the safe operation of the Super Vac Cloud 9 Smoker.



WARNING and **CAUTION** are used throughout this manual to forewarn of possible danger to the users if precautions are not observed.

As is customary in military and some commercial manuals, the precautions will always precede the steps to which it refers so that the users will be aware of any potential danger before performing the task.



WARNING and **CAUTION** labels are key equipment parts. Do not remove, change or cover these labels. If the labels are not readable, contact SUPER VACUUM MANUFACTURING CO.



Removing or tampering with **WARNING** and **CAUTION** labels will void all warranties.

3. BASIC DESCRIPTION

The SUPER VAC CLOUD 9 SMOKER is delivered with a Remote Control Timer and a 50 feet extension cord.

It is designed with safety and reliability in mind. This unit will generate pure white non-toxic smoke for as long as you want (100% duty cycle with specified line voltage). This smoker is also equipped with an Auto Clean Cycle (ACC). This system cleans the heating block after the first heating cycle and after every production of smoke preventing residual build-up and clogging.

At the heart of the SUPER VAC CLOUD 9 SMOKER is an electronic assembly that keeps the heating block at a stable temperature. This is done by the integration of three electronic fail-safe systems. This design will protect against over and under-heating conditions and component failures. Also included is a pressure relief safety that will protect against over pressurizing or gas regulator failures.

- When an overheating of the heating block is detected, a safety circuit is triggered, cutting off power to the heating element, preventing hazardous conditions.
- When an under-heating condition is detected, the unit will stop producing smoke until the temperature of the heating block is back within parameters.
- When the internal temperature of the unit exceeds 140°F, a separate safety circuit is triggered, cutting off power preventing damage and hazardous conditions.
- Finally, a pressure relief valve, activated at a 125 psi, protects the pneumatic system. This will prevent over pressurizing.

4. TECHNICAL SPECIFICATIONS

Smoke production capacity:	Up to 2500 cubic feet per minutes
Fluid consumption:	0.33 US gal. per hour at 40 psi (maximum operating pressure)
Cloud 9 Smoker fluid type: (use only)	Super Vac Oil-based Smoker Fluid (SVOSF)
Fluid tank capacity:	0.66 US gal.
Gas consumption:	2,13 lbs. per hour at 40 psi
ACC:	Auto Clean Cycle
Particle size:	1 micron
Warm-up time:	Maximum 10 minutes
Operating voltage:	110 VAC, 50/60Hz
Power consumption:	1400 Watts
Dimension of unit:	18.75" D x 22" W x 20.75" H
Dimension of remote control timer:	6.7" L x 2.9" W x 1.9" H
Weight of unit:	82 lbs.
Shipping weight:	102 lbs.

5. SETTING UP



WARNING

It is recommended that this unit be operated under the supervision of personnel that have read and understood this manual.

Never install this unit overhead.

The smoker must be operated and stored in an upright position on a stable and level surface.

Do not operate closer than six feet (6 ft.) from personnel.

The maximum operating pressure is 40 psi.

Use in a well-ventilated area.



WARNING

RISK OF FIRE HAZARD - The smoker output shall not be installed closer than six feet (6 ft.) from any open flame.

NOTE: Cut back on smoke production when the level of smoke desired is achieved.

DO NOT OVER SATURATE.

6. GAS AND FLUID REQUIREMENTS

6.1 Gas



Gas cylinder must be manufactured, inspected and tested in accordance with U.S. Department of Transportation (DOT) 3AL



To avoid fire hazard as well as explosion risk, use only industrial grade Carbon Dioxide (CO₂) gas or industrial grade Nitrogen (N₂) gas.



To prevent leaks, always use a neoprene washer when connecting the regulator to a CO₂ cylinder.

NOTE: When operating the CLOUD 9 SMOKER using CO₂ as a propellant, the CO₂ bottle must be in an upright position to prevent freezing of the regulator.



CO₂ and N₂ gases have different CGA (Compressed Gas Association) specifications (CO₂ = CGA 320 and N₂ = CGA 580). Use the proper regulator. CO₂ or N₂ gas is used as a propellant when generating smoke; it is also used to clean the heating block when the ACC is initiated. Output pressure can be adjusted by mean of the CO₂ or N₂ regulator. The operating pressure range for the CLOUD 9 SMOKER is 10 to 40 psi.

6.2 Fluid



WARNING

Operate the Super Vac Cloud 9 Smoker only with the Super Vac Oil-based Smoker Fluid (SVOSF).
Making sure that no other particles are mixed or added to the Super Vac fluid (SVOSF).



CAUTION

The Super Vac Oil-based Cloud 9 Smoker Fluid produces a pure white non-toxic smoke. Use of this cloud 9 smoker with any other fluid will automatically void the warranty. Super Vac Oil-based Cloud 9 Smoker Fluid (SVOSF) is available at authorized Super Vac dealers and distributors.

7. FILLING OF THE FLUID TANK



To fill the fluid tank, the following sequence must be observed:

- Turn off the (on/off smoke) switch on the remote timer control (see Fig. A), wait 2 minutes for the ACC and depressurization of the fluid tank.
- Now unscrew the red cap located on top of the unit and slowly pour the Super Vac Oil-based Smoker Fluid (SVOSF) until it reaches the inside bottom of the opening.
- **Avoid overfilling**, screw back the cap and make sure it is hand tight.



To avoid fire hazard and explosion risk, use only Super Vac Oil-based Smoker Fluid (SVOSF). The use of any other fluid will void the warranty and may damage the CLOUD 9 SMOKER.

OPERATING INSTRUCTIONS

Fig. A CLOUD 9 SMOKER Remote Control Timers



BURN HAZARD – The cloud 9 smoker output NOZZLE reaches high temperature – AVOID CONTACT EVEN AFTER SHUT DOWN.

To power on the unit, the following sequence must be observed:

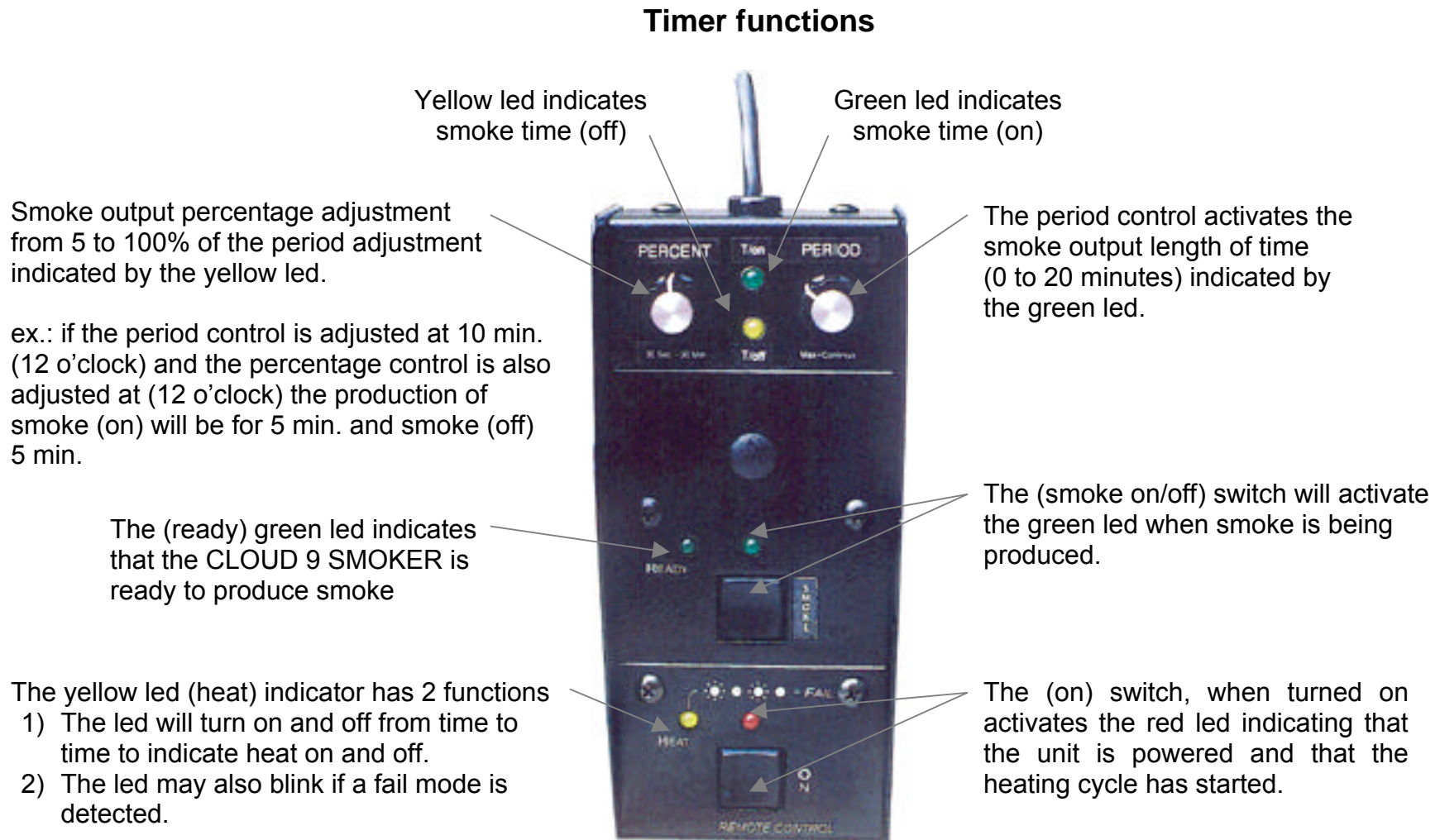
- Connect the SUPER VAC CLOUD 9 SMOKER to a 110 Vac power outlet and turn on the main power switch located on the side of the unit near the A.C. cord.
- Turn on the (on) switch on the remote control timer, the red led will come on indicating that the unit is powered, the yellow led will also come on indicating that the first heating cycle has started. This should take a maximum of 10 minutes.
- Now open the gas cylinder and adjust the regulator to a minimum of 10 psi, the “ready” condition will be indicated by the green led which will come on when the pre-set temperature is reached; at this stage, the yellow led will go off and the initial Auto Clean Cycle (ACC) will be automatically triggered.
- After this initial cleaning cycle, which will take approximately 30 seconds, the unit will be ready to produce smoke.
- The smoke output is adjustable by increasing or decreasing the pressure on the CO₂ or N₂ gas regulator (10 to 40 psi).

The operating temperature of the unit is maintained within a narrow margin the yellow led (heat) will turn on and off from time to time to indicate heat on and heat off.

If two of the three electronic fail-safe systems (namely, the over-heating or the internal temperature limit) is detected, the smoke production will stop and the yellow led will start blinking indicating a fail mode. Immediately turn off the unit, wait 4 to 5 minutes and retry the unit. If the fail mode reappears, disconnect the unit and contact SUPER VAC.

Smoke production will continue as long as all control parameters are within specifications. When the smoke on signal is turned off, the ACC (Auto Clean Cycle) is automatically triggered to clean the heating block.

Fig. A CLOUD 9 SMOKER Remote Control Timer



NOTE: To operate without the timer functions you must turn to the full position the period and the percent controls.

8. SHUTDOWN PROCEDURES

Fig. A CLOUD 9 SMOKER Remote Control Timers



CAUTION

Never disconnect or power off while your cloud 9 smoker is producing smoke. Read the following shutdown procedures. The 100% duty cycle is continuous with specified line voltage and will degrade with line voltage loss. Reducing the operating pressure can compensate this.

To power off the unit, the following sequence must be observed:

- Turn off the (smoke) switch on the remote control timer.
- Wait for the Auto Clean Cycle (ACC) to complete. The recommended minimum ACC pressure is 10 psi.
- Turn off the “on” switch on the remote control.
- Turn off the “main power switch” on the unit and then disconnect from the power outlet.
- Turn off the CO₂ or N₂ gas cylinder.

9. SHIPPING PROCEDURES

When returning the unit for repair or warranty, always drain the fluid tank and ship with an empty CO₂ or N₂ cylinder.

NOTE: The fluid drain plug (3/16 Allen) is located under the fluid tank.

10. WARRANTY

LIMITED WARRANTY FIVE YEARS

Super Vacuum Manufacturing Company warrants that the equipment is free from defects in materials and workmanship when used and operated for a period of five years. The responsibility of Super Vacuum Manufacturing Company under this limited warranty is limited to the repair and replacement of any parts which are found defective and which are returned to Super Vacuum Manufacturing Company at 3842 Redman Dr, Fort Collins, CO 80524 with transportation charges prepaid (C.O.D. shipments will not be accepted).

Prior to returning defective parts to SUPER VACUUM MANUFACTURING COMPANY, the original purchaser shall make a claim in writing to SUPER VACUUM MANUFACTURING COMPANY at the above address indicating the model number and type of defect. No parts or equipment will be received by SUPER VACUUM MANUFACTURING COMPANY for repair or replacement under this warranty without specific written authority from it in advance.

Any parts damaged by improper installation, overloading, abuse or accident of any type or causes are not covered by this warranty.

All equipment manufactured by us is pre-run and tested before leaving our plant, and is shipped in good working order and condition. We therefore extend to the original purchasers the following Limited Warranty for the period of five years from the original date of purchase:

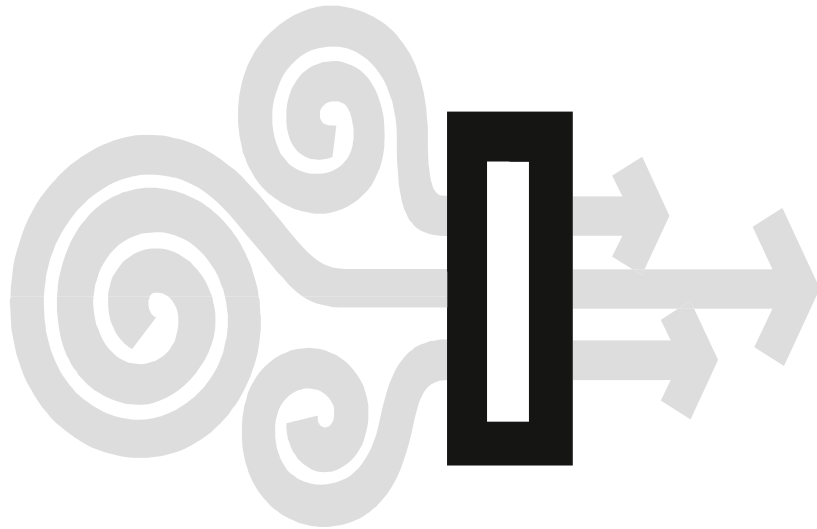
1. This warranty does not apply to defects caused by accident, misuse, neglect, or wear and tear, nor can we be held responsible for incidental and consequential expense and loss, nor does this warranty apply to equipment where alterations have been executed without our knowledge or consent. These conditions are readily discernable when the equipment is returned to us for inspection.
2. If equipment received is found to have been damaged in transit, a claim should be made against the carrier within three days, as we assume no responsibility for such damage.
3. Any service other than our Authorized Service voids this warranty.
4. This warranty is in lieu of and is intended to exclude all other warranties, express or implied, oral or written, including any warranties of MERCHANTABILITY or FITNESS for a particular purpose.

11. CONTACT INFORMATION

For parts or service information, contact:

Super Vacuum Manufacturing Company, Inc.
3842 Redman Dr
Fort Collins, CO 80524

Phone: 1-800-525-5224
970-297-7100
FAX: 970-297-7099
Internet: www.supervac.com



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