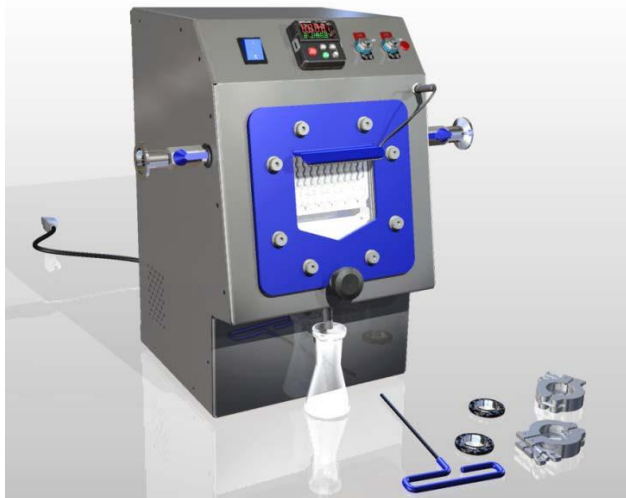




Owner's Manual

Terpene Trap

CF-1000



IMPORTANT SAFETY INFORMATION:

Please carefully read this manual before attempting to use your Terpene Trap. For your safety, comply with all safety instructions and warnings contained in this owner's manual to prevent personal injury.

To view the full line of Scientific 710, LLC products, please visit www.scientific710.com.

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Introduction

Thank you for purchasing your Terpene Trap from Scientific 710, LLC, the world leader in trapping terpenes and VOCs (Volatile Organic Compounds).

This owner's manual provides specific operating instructions for the Terpene Trap. Use the Terpene Trap only as instructed in this owner's manual.

Product Benefits

- Reclaim valuable terpenes, hydrosol, and other VOC while vacuum purging, steam distilling, decarboxylating, etc.
- Extends the life of your vacuum pump, achieves deeper vacuum levels, and provides back flow prevention
- Plug & play operation. Requires no dry ice, liquid nitrogen, chiller, coolant, plumbing, etc. Simply turn on and set your desired temperature
- Operates at negative and positive pressures
- Watlow push button temperature control and dual digital display
- Large LED lit borosilicate sight glass
- Stainless steel construction, viton seals, KF-25 intake and exhaust with centering rings and clamps, Parker drain valve, stainless 3/8" hose barb drain port, 50mL terpene flask, and 3/8" flask connection hose included
- Space-conserving countertop design
- Generous 50mL internal capacity
- Food grade materials, 1 year warranty, Made in the USA

Important Safety Information

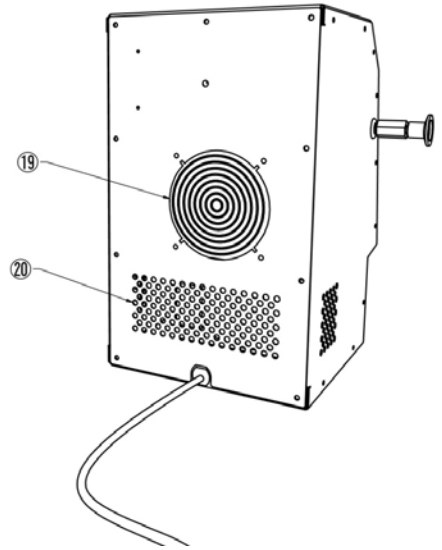
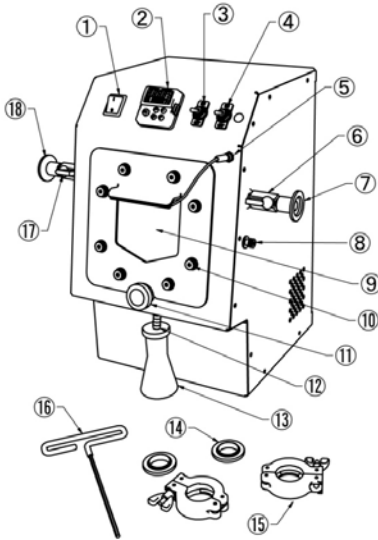
These instructions are not meant to cover every possible condition and situation that may occur. Please read all instructions before using this Terpene Trap. Failure to carefully read and follow all instructions may result in possible electric shock or fire hazard, and will void the manufacturer's warranty.

1. Use this Terpene Trap only as instructed in this owner's manual.
2. To protect against electric shock, do not immerse this Terpene Trap or its plug and cord in water.
3. Place the Terpene Trap on a level surface.
4. This Terpene Trap is intended to fit into a matching receptacle. Under no circumstances should the plug be altered in any way. An improper connection can result in electric shock.
5. Avoid using extension cords with this Terpene Trap.
7. Do not place the Terpene Trap near an open flame or cooking/heating appliances.
8. This product is not intended for use in wet or damp areas.
9. If the Terpene Trap will not be in use, empty the trap of any remaining water, terpenes, hydrosol, and any other volatile organic compounds.
10. If the Terpene Trap's plug or power cord is damaged, do not attempt to repair the components

yourself. Please contact Scientific 710 Customer Service at info@scientific710.com.

11. The trap should be checked frequently to make sure it does not become plugged with frozen material if operating below 0 °C (32 °F).
12. After completion of a cycle, any remaining trapped condensate should be vented in a safe and environmentally acceptable way. High vapor pressure substances left in the trap when sealed may build up pressure. For additional safety the trap is equipped with an internal 50 psig Pressure Relief Valve. Please note the Pressure Relief Valve will open at pressures in excess of 50 psig and could cause an explosion if flammable vapors are present. Please contact Scientific 710 if you need the ability to safely purge flammable gases over 50 psig.

List of Main Parts



- | | |
|---------------------------------|--|
| 1. Power Switch | 11. Drain Valve |
| 2. Temperature Control | 12. Drain Port (3/8 Barb) |
| 3. Sight Glass Light Switch | 13. Flask |
| 4. Warmer Switch | 14. KF-25 Viton Centering Ring |
| 5. Sight Glass Light Power Plug | 15. KF-25 Clamp |
| 6. Exhaust Valve | 16. Sight Glass Removal Tool (4mm Hex) |
| 7. Exhaust Port (KF-25) | 17. Intake Valve |
| 8. Purge Valve | 18. Intake Port (KF-25) |
| 9. Sight Glass | 19. Fan Exhaust |
| 10. Sight Glass Bolt | 20. Fan Intake |

Sight Glass Foam (not shown)

Before Using Your Terpene Trap

1. Remove the Terpene Trap's packaging and remove any tape and/or protective film from the unit. Do not discard the molded Foam Sight Glass Cover.
2. Check to make sure the components shown in the list of main parts are included.
3. Find a location for your Terpene Trap that is positioned away from direct sunlight and other heat sources such as stoves, furnaces and radiators.
4. Place the Terpene Trap on a flat, level surface and make sure there is at least 3 inches of space in between the back and sides of the Terpene Trap and the wall. Ensure Fan Intake openings have adequate access to fresh air
5. Allow the unit's refrigerant to settle for one hour before plugging in the Terpene Trap for the first time if it has recently been sitting in a non-upright position..
6. If the unit will not be in use for an extended period of time, drain all of the contents left inside the trap.

Electrical Hazards



Electrical Shock Hazard

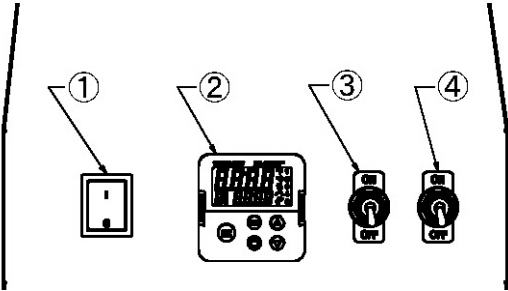


Plug into a grounded outlet.
Do not use an extension cord.
Failure to follow these instructions can result in death, fire, or electrical shock.

This appliance requires a standard 115 volt, 60 Hz electrical outlet. Consult a certified electrician for any questions regarding power and/or grounding issues.

Please Note: Improper use of the grounded plug can result in electric shock. Do not use this Terpene Trap if the power cord is damaged.

Control Panel



1	ON/OFF Switch
2	TEMPERATURE Controller
3	LED Light Switch
4	WARMER

Operating Instructions

1. Find a suitable location for the Terpene Trap. Connect your hoses/piping to the Intake and Exhaust Ports of the unit using the supplied KF-25 Centering Rings and Clamps.

Please Note: The CF-1000 is omnidirectional meaning it can handle flow in either direction; however, the preferred flow direction is from left to right when facing the front of the unit)

2. Open the Intake and Exhaust Valves. Close the Drain Valve and Purge Valve finger tight. Care should be taken to not over tighten either valve.
3. Plug the Terpene Trap into a suitable electrical outlet. Switch the “ON/OFF” switch on the control panel to the “ON” position. Using the up and down arrows on the Temperature Controller set your desired condensing temperature to begin the chilling cycle.

Please Note: The unit has a refrigerant compressor inside and is not intended to be rapidly cycled ON and OFF. If you restart the unit immediately after turning it off, you will experience a delay before chilling continues. The time required to reach the set temperature may vary slightly with variances in ambient temperature. The minimum temperature the device can reach will also vary slightly with changes in ambient temperature and cooling load (e.g. incoming gas temperature, flow rate, etc.).

4. Once the desired trapping temperature is achieved, turn your vacuum pump on to begin trapping terpenes. The unit is equipped with a double pane Borosilicate sight glass; however, at the very low temperatures the CF1000 can attain, frost will form on the unit from the moisture in the air. To prevent this, install the Foam Sight Glass Cover onto the front of the unit while operating at low temperatures. Isopropyl alcohol or other de-icing agent can be used for visibility if necessary.

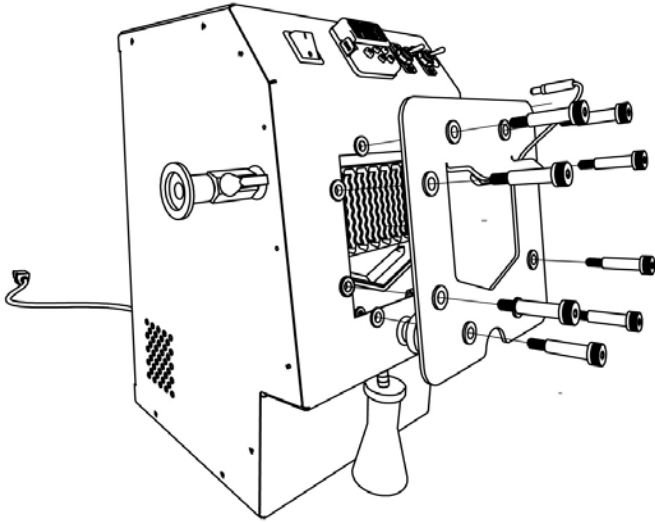
Please Note: If you are using the unit to trap hydrosol from steam distillation, drying and/or decarboxylation,

please be mindful that water is present and you will need to operate above the freezing temperature of the condensate. Operating at below the freezing temperature may cause solids to form inside the unit which will eventually plug the pathways and may cause damage. Periodically verify there are no significant solids forming inside the trap. If there is, increase the set temperature or activate the Warmer Switch until they liquefy.

5. Condensate can be drained from the trap during or after operation.
 - a. Close both Intake and Exhaust Valves to isolate the condensate from the rest of the system.
 - b. If the unit is on, activate the Warmer by turning the Warmer Switch to the ON position. This will begin raising the temperature of the condensate reducing its viscosity.
 - c. Equalize the pressure inside the trap with the atmosphere by opening the Purge Valve on the right side of the unit.
 - d. Ensure there is an appropriate container directly under or attached to the Drain Port.
 - e. Open the Drain Valve below the Sight Glass all the way by turning the Drain Valve's knob counter clockwise to allow the condensate to flow out of the trap.
 - f. Once the condensate is drained continue operation by turning off the Warmer, closing the Drain and Purge Valves, and opening the Intake and Exhaust Valves.

Please Note: It will take some time for the trap to become coated with enough condensate to begin pooling and dripping down toward the base of the trap and Drain Valve. Drawing a vacuum on the trap then opening one or more valves can assist in recovering the last of the condensate from the trap as necessary. Positive pressure can also be applied with the Drain Valve completely open.

Maintenance



To completely clean your trap and/or replace the O-Ring, follow these instructions:

1. Ensure the trap is above freezing before continuing.
2. Break free each of the 8 Sight Glass Bolts by rotating each one counter clockwise using the supplied Sight Glass Removal Tool.
3. Once all Sight Glass Bolts have been freed, unscrew and completely remove each bolt and unplug the Sight Glass Light power cord.
4. The Sight Glass can now be removed by tilting the top outward until the Sight Glass has clearance beyond the enclosure then lift upwards. Set aside in a safe clean place.
5. Cleaning the trap can be done using isopropyl alcohol with the Drain Valve completely open.

in a spray bottle then blowing out with clean compressed air.

- 6.** The 1/8" X 5" ID Viton O-Ring can be removed and replaced with a new one if needed.
- 7.** Installation of the Sight Glass is the opposite of removal. Set the Sight Glass down on to the Drain Valve then tilt inward and adjust until the Sight Glass rests on the O-Ring seal. Insert and start each bolt by hand to ensure no cross threading. First tighten all bolts finger tight. Then use the Sight Glass Removal Tool to turn each bolt one half rotation at a time until they are all snug. Tightening the Sight Glass Bolts in sequential steps ensures even pressure on the O-Ring seal. Do not over tighten the bolts. The seal is satisfactory once all bolts are properly seated.

To replace the Purge Valve O-Ring, follow these instructions:

- 1.** Ensure the trap is above freezing before continuing.
- 2.** Completely unscrew the Purge Valve bolt using your fingers or the supplied Sight Glass Removal Tool to rotate the bolt counter clockwise.
- 3.** Remove the bolt completely and replace the 1/16" X 3 /16" ID Viton O-Ring on the end of the bolt.
- 4.** Reinstall the bolt.

Technical Support

Scientific 710 is committed to providing a premier service experience. If you are experiencing any technical issues with your product related to either setup or operation, please contact our product support team at info@scientific710.com

Product Specifications

Model:	CF-1000
Type:	Terpene Trap
Dimensions:	L 12" x W 15" x H 17"
Weight:	30 Pounds
Exterior:	Stainless Steel
Application:	Capture Terpenes and/or Hydrosol
Voltage:	115 Volts / 60HZ
Max Watts:	275 Watts
Max Amperage:	2.4 Amps
Compressor Power:	1/6 hp
Compressor Certifications:	UL, CUL
Cooling Capacity:	80 Watts Continuous
Minimum Temperature:	-20 °F (-29 °C)
Chilling Rate	~ 6 °F/min
Condensate Capacity:	50mL internal
Operating Pressure	0.005-2,500 Torr (.0001 - 50 psi)
Installation:	Freestanding
Refrigerant Type:	Eco-Friendly R-134A
Display Type:	Watlow Dual Digital PID Temperature Controller
Drain Type:	3/8" Hose Barb
Intake/Exhaust Type:	KF-25
Condensate Warmer:	YES

Removable Sight Glass:	YES
Serviceable O-Ring:	YES
Continuous Operation:	YES
LED Lighting:	YES
Safety Features:	<ul style="list-style-type: none"> • Thermally Protected Compressor • 50 psi Pressure Relief Valve
Sealing Material:	Viton
Terpene Trap Material:	Aircraft Aluminum
Sight Glass Material:	Borosilicate Glass
Pipes, Fittings, and Valves Material:	Stainless Steel
Auxiliary Terpene Container:	50 mL Borosilicate Flask
Country of Manufacture:	USA
Warranty:	1 Year

Warranty

Scientific 710 products are warranted to be free from defects in workmanship and materials for one (1) year from the date of purchase. If the product is found to be defective within this period, Scientific 710, at its sole option, will repair or replace any components that fail during normal operation. The repairs or replacement will be made at no charge to the customer for parts and labor, assuming that the customer shall be responsible for all transportation costs to and from Scientific 710.

Scientific 710 retains the right to repair or replace (with a new or newly-refurbished replacement product) the appliance at its sole discretion.

This warranty does NOT apply to the following:

- Products without a proof of purchase
- Products purchased from a source other than an authorized Scientific 710 dealer
- Cosmetic damage such as scratches or dents
- Damage caused by service performed by anyone who is not an authorized service provider of Scientific 710
- Damage in transit
- Damage caused by accident, abuse, misuse, water, flood, fire, improper installation, maintenance negligence, acts of God or any other acts of nature or external causes
- Damage to a product caused by modifications or alterations without the written permission of Scientific 710
- Normal wear and tear of parts that are designed to be replaced, such as O-Ring seals
- Power failure and improper power supply such as low voltage, defective wiring or inadequate fuses

- Use of force or damage caused by external influences
- Complete or partially dismantled appliances

THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ANY LIABILITY ARISING UNDER ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, STATUTORY OR OTHERWISE. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, WHICH MAY VARY FROM STATE TO STATE.

IN NO EVENT SHALL SCIENTIFIC 710 BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE, OR INABILITY TO USE THIS PRODUCT OR FROM DEFECTS IN THE PRODUCT. SOME STATES DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

If you believe your product is defective, contact Scientific 710 for warranty service at info@scientific710.com. In your correspondence with Scientific 710, please describe the problem in detail. You will also need to provide proof of purchase and a return shipping address.

After a Scientific 710 representative confirms that your product is defective and is still under warranty, you will receive a claim number and return shipping instructions. Products sent to our headquarters without a warranty claim may be refused.