## SLIMLINE 2500 & 3300 OWNER'S MANUAL



#### Conforms to ANSI/UL Std 427

#### Certified to CAN/CSA Std C22.2 No. 120

We manufacture, test and certify 100% of our wine cooling units in the USA. By sourcing the best components and closely controlling our manufacturing processes, we can assure the highest-quality, lowest defect manufacturing rates in the industry.

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## Whisper**KOOL**

#### **INTRODUCTION**

The Slimline is WhisperKOOL's quietest interior-venting self-contained unit. The Slimline was designed to mount in a living area, fitting into the often unused space between the cellar door and ceiling, giving the collector maximum storage capacity. The system is equipped with WhisperKOOL's Platinum Series controller, which utilizes Advanced System Protection Technology. A series of strategically placed monitoring probes ensures efficient performance and long cooling unit life. Built with efficiency in mind, the Slimline has the ability to cool cellars up to 350 cubic feet while using less power than most traditional cooling units.

#### **Customer Service**

Thank you for purchasing a WhisperKOOL Slimline cooling unit. We strive to provide the highest-quality products and the best possible customer service. If you have any questions about your WhisperKOOL unit, please call us at 1-800-343-9463.

#### **Using the Manual**

This owner's manual is intended to assist in the proper installation and maintenance of the WhisperKOOL Slimline cooling system. In order to ensure the longevity of your cooling unit, the equipment should be installed properly. Also, a proper care and maintenance schedule should be followed. Please read and review this manual carefully and keep it for future reference.

#### What is the WhisperKOOL Slimline Cooling System?

The WhisperKOOL Slimline system is a specialized refrigeration unit designed for one purpose: to maintain the optimal temperature and humidity levels conducive to the proper storage and aging of fine wines. It is a self-contained cooling unit designed to be used as a forced-air, through-the-wall unit.

#### How Does the WhisperKOOL Slimline Work?

The WhisperKOOL Slimline cooling system is especially designed to maintain optimal conditions for wine storage and aging. The system is specially designed for slow cooling, as this greatly reduces the amount of humidity removed from the cellar.

#### **Temperature Setting**

The WhisperKOOL Slimline unit can be set at any temperature within the acceptable wine-aging range of  $45^{\circ}$ F to  $67^{\circ}$ F. It is designed to create up to a  $30^{\circ}$ F temperature differential between the wine cellar and the space to which it is exhausting.

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### 1-800-343-9463

#### **BEFORE YOU START**

- 1. **Inspect the unit before installation.** If damage is found, please contact your distributor or WhisperKOOL Customer Service at 1-800-343-9463.
- 2. The unit should **remain in an upright position for 24 hours** prior to operation.
- 3. The unit **requires a dedicated 115V, 20-amp circuit**. Use a surge protector with the WhisperKOOL unit. **Do not use a GFI** (ground fault interrupter) line.
- 4. The unit is designed to gently cool down the temperature of the cellar over time by cycling cooler and cooler air throughout. **Test the unit prior to installation.**
- 5. You are **REQUIRED** to **install a drain line** to remove condensation from the unit.
- 6. The unit is intended **for use in properly designed and constructed wine cellars.** Hire a professional wine storage consultant with a valid contractor's license to build your wine cellar.

Never try to open the WhisperKOOL unit, repair it yourself, or use a service company without WhisperKOOL's authorization. This will void your warranty.

If you encounter a problem with your WhisperKOOL unit, please refer to the Troubleshooting Guide. If you have any further questions, concerns, or need assistance, please contact WhisperKOOL Customer Service at 1-800-343-9463. Please be sure all testing has been completed prior to contacting Customer Service. Please have your results ready for your representative.

#### **RECEIVING & INSPECTING THE UNIT**

- Use caution when lifting and check the package for damage.
- Lift only at the designated hand-hold locations on the shipping container, or fully support the unit from underneath. A shipment may include one or more boxes containing accessories.
- Before opening the container, inspect the packaging for any obvious signs of damage or mishandling.
- Write any discrepancy or visual damage on the bill of lading before signing.
- Place the box containing the WhisperKOOL unit on a tabletop to prepare it for testing prior to installing.
- Sit unit upright for 24 hours.

**Note:** WhisperKOOL units are manufactured in the USA and tested prior to shipment.

- Review the packing slip to verify contents.
- Check the model number to ensure it is correct.
- Check that all factory options ordered are listed.

If any items listed on the packing slip do not match your order information, contact WhisperKOOL Customer Service immediately.

#### Check the shipped box for the following contents:

#### 2500

- (1) Slimline 2500 cooling unit
- (2) Mounting brackets

#### Accessory Kit #1:

- (1) Slimline owner's manual
- (1) Bottle probe

#### Accessory Kit #2:

- (4) ½" self-tapping screws (silver)
- (4) 1¾" hex-head screws
- (1) Drain line tube (%"ID clear plastic tubing) with brass connector
- (4) Insulation foam strips (10")

#### 3300

- (1) Slimline 3300 cooling unit
- (2) Mounting brackets

#### Accessory Kit #1:

- (1) Slimline owner's manual
- (1) Bottle probe

#### Accessory Kit #2:

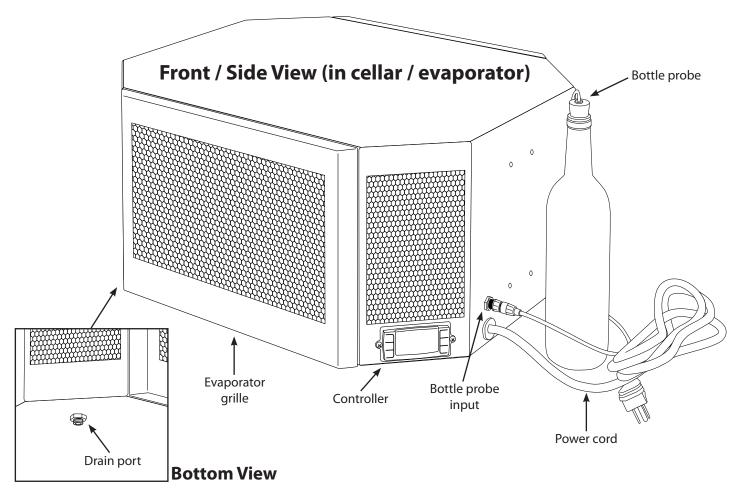
- (4) ½" self-tapping screws (silver)
- (4) 1¾" hex-head screws
- (1) Drain line tube (%" ID clear plastic tubing) with brass connector
- (4) Insulation foam strips (10")

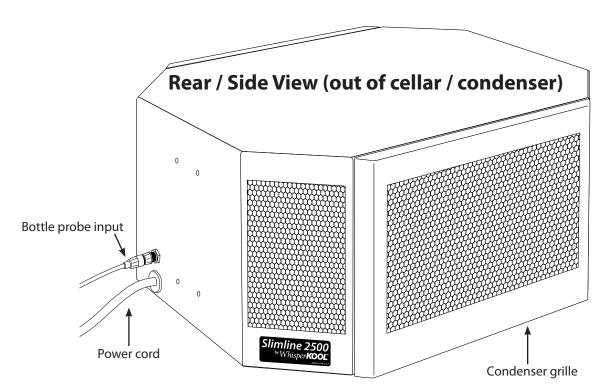
Please leave the unit in its original box until you are ready for installation. This will allow you to move the product safely without damaging it.

**TIP:** Save your box and all packaging materials. They provide the only safe means of transporting/shipping the unit.

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## **QUICK REFERENCE GUIDE**

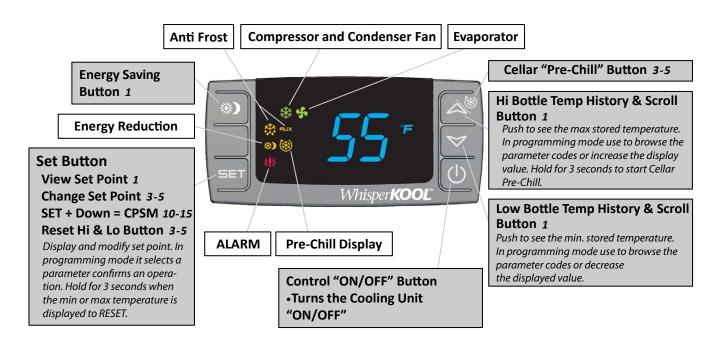






#### CONTROLLER LAYOUT

**Note:** 1 or 3–5 indicates the amount of time (in seconds) that a button must be pushed to activate a particular setting. Refer to page 18 for a complete listing of buttons and symbols.



#### **UNIT SPECIFICATIONS**

	Slimline 2500	Slimline 3300	
Cellar Size (cu. ft.)*	350	650	
Dimensions	22"W x 10.25" H x 19" D	22"W x 10.25"H x 19"D	
Weight	50 lbs	54 lbs	
AMPS (starting/running)	17.5/3.5	30/4.9	
dBA	Evaporator: 59 / Condenser: 53	Evaporator: 61 / Condenser: 60	
Drain Line	¾" ID clear plastic tubing		
Installation	Through the wall (ideally above a doorway)		
Thermostat	Digital display		
Temp. Delta	30°F temperature differential		
Warranty	2 years (parts and labor)		

#### \* Sizing the Unit to the Room

The specification chart will provide information on the unit's cooling capacity. There are circumstances in which a cellar design may require a larger unit due to preexisting design restrictions. Certain building materials such as glass, stone, or concrete may seem adequate but do not offer the insulation capacity required to maintain the optimum temperature for storing wine. We recommend purchasing a unit with a larger capacity to compensate for these design limitations. Undersized cooling units can lead to premature failure and/or prevent the system from reaching the desired set temperature. As a result, they are not covered under warranty.

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#### PREPARING THE WINE CELLAR

The performance and life of your system is contingent upon the steps you take in preparing the wine cellar. Improperly preparing your enclosure or incorrectly installing your unit may cause unit failure, leaking of condensation, and other negative side effects.

#### It is highly recommended that you obtain the assistance of a wine storage professional.

Wine storage professionals work with licensed contractors, refrigeration technicians, and racking companies to build well-insulated, beautiful, and protective wine cellars. WhisperKOOL has put together some useful tips to assist in the installation process. Our recommendations are meant to act as a guide in the process of building a proper enclosure. Your intended location may have specific needs which we do not address.

#### Wall & Ceiling Framing

Build wine cellar walls using standard 2x4 or 2x6 boards and ceiling joists without violating local or state codes in your area. As a general rule, the thicker the walls and the higher the insulation value, the more consistent your cellar temperature will be.

#### Insulation

Insulation is **REQUIRED** in order to properly use WhisperKOOL products. It is vital that all walls and ceilings be insulated to keep the cellar temperature as consistent as possible during the summer and winter months. Standard fiberglass or rigid foam insulation is normally used in cellar construction; in some cases, "blown-in" insulation is used. The R-value, or quality of insulation, is determined by the rate at which heat passes through the insulation. The higher the R-value, the more resistant the insulation is to conducting heat, and the more consistent your wine cellar's temperature will be. Using higher R-values in insulation will lower your operating costs and WhisperKOOL unit run time. (R-13 is the recommended minimum; R-19 is preferred for interior cellar walls, and R-30 for ceilings and exterior walls.)

#### **Vapor Barrier**

Water vapor creates its own pressure, separate from the ambient air pressure, and will intrude into colder/drier areas. A vapor barrier is **REQUIRED** in order to prevent the intrusion of water vapor and maintain the correct cellar temperature and humidity. It is recommended that 6-millimeter plastic sheeting be applied to the warm side of the cellar walls. The vapor barrier must also be applied to the outside walls and ceiling. If it is impossible to reach the outside, then the plastic must be applied from within the cellar. The most common method is to wrap the entire interior, leaving the plastic loose in the stud cavity so the insulation can be placed between each stud. All of the walls and ceiling must be wrapped in plastic for a complete vapor barrier.

In areas of high humidity, such as Southern and Gulf States, the vapor barrier will prevent infiltration of warm moist air. The moist air can cause mold to form, and standing water in drain pans promote microbial and fungal growth that cause unpleasant odors and indoor air quality problems. If mold is found, remove it immediately and sanitize that portion of the unit.

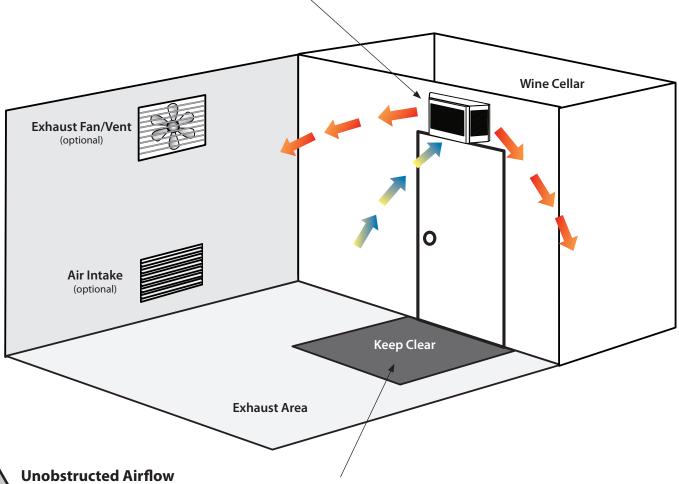
**Note:** High humidity significantly increases the heat load on the cooling system.

Any break in the vapor barriers (cut, nail hole, over-lapping, etc.) will cause a moisture leak and must be sealed. The electric conduit is a "duct" for vapor to travel in. The conduit should be caulked and sealed on the warm air end.



#### **Mounting the Unit**

The unit must be mounted within 18 inches of the ceiling in order to achieve sufficient cooling. As the room cools down, the warm air will rise to the ceiling. Mounting the unit high in the room will create a consistently cool environment by capturing the warm air and replacing it with cool air. Mounting the unit low in the room will result in a temperature variation in the room due to (a) the unit's inability to draw warm air down from the ceiling and (b) cold air settling to the floor.



Unobstructed airflow to and from the unit is critical to the unit's overall performance and lifespan. Make sure there is a minimum of three (3) feet of horizontal clearance in every direction around the unit (five feet is ideal). The air blown by the fans needs to circulate and either dissipate or absorb heat from the space. The system will operate more efficiently with a greater amount of air to exchange.

**NOTE:** Do not attempt to camouflage or cover the unit with any sort of aftermarket grille, accessory, etc. This can restrict airflow, prevent the unit from working properly, and void the warranty. Please feel free to call WhisperKOOL Customer Service with any questions or concerns regarding installation requirements.

#### **Door and Door Seal**

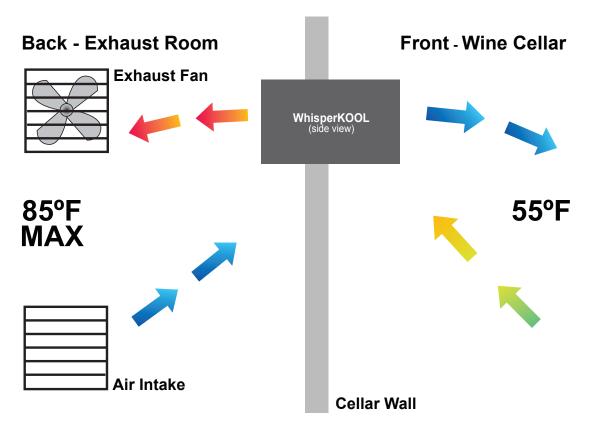
An exterior-grade  $(1\frac{3}{4}")$  door must be installed as a cellar door. It is very important that weather stripping be attached to all four sides of the doorjamb. A bottom "sweep" or threshold is also required. The door must have a very good seal to keep the cool cellar air from escaping out of the cellar. If the door does not seal properly, the unit will run continuously.

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#### **Ventilation**

The necessity of dissipating heat away from the unit is critical to the unit's performance and cannot be overstated. As the unit operates and cools, a greater amount of heat is generated on the exhaust side of the unit. Adequate ventilation is required in order to dissipate heat away from the unit. If ventilation is inadequate, the exhaust will heat up the area or room and adversely affect the unit's ability to cool. In some cases, it may be advisable to install a vent fan to dissipate heat within the exhaust area on the rear of the unit. If you install a vent fan, however, you must have a fresh air inlet as well.

**Note:** If you are unsure whether you have adequate ventilation in your installation location, please contact us to assess your specific installation at support@whisperkool.com or 1-800-343-9463.



#### **Ambient Temperature Factor**

The cooling system has the ability to cool a wine cellar efficiently to 55°F as long as the ambient temperature of the area that it is exhausting to does not exceed 85°F. Therefore, you want to exhaust the unit in a room which will not exceed 85°F, preferably 75°F. Otherwise, the unit will not have the capacity to keep the wine at a desirable 55°F.



WARNING! Allowing the unit to operate in high ambient temperatures for extended periods of time will greatly decrease the life of the unit and void your warranty.



#### **Drain Line**

All units come with a drain line for additional removal of excessive condensate. This is a backup system for the evaporator. You are **REQUIRED** to install the drain line attachment. During operation, the cooling unit will strip excess water from the air in order to maintain the proper level of humidity within the cellar. The condensate evaporator will heat and dissipate the excess moisture through the rear of the unit. However, in extreme humidity, additional condensate will be created. High-humidity air has less capacity to absorb additional moisture through the exhaust of the unit. The drain line will prevent overflow and leaking by allowing for the discharge of the additional condensate. WhisperKOOL carries a condensate pump kit, which allows the excess condensate to be pumped up to 20 feet away from the unit.



#### PRE-INSTALLATION

Skill level: Moderate

Follow local building codes and/or consult a licensed contractor

#### **Electrical Needs**

The Slimline system **requires a dedicated 115V, 20-amp circuit**. The unit draws a large amount of amps during its initial startup. By designating a dedicated circuit breaker, you will guarantee that the unit has enough power to run effectively. Contact an electrician for assistance with the installation of this dedicated electrical circuit:

- Match the electrical outlet to the plug provided on the WhisperKOOL unit.
- Provide a dedicated circuit and wiring for the unit.

#### **Electrical Outlet**

The unit is equipped with a 12-foot power cord located on the evaporator side of the unit. Plug your WhisperKOOL unit into a surge protector or power conditioner. Power surges and spikes can damage sensitive electrical equipment. WhisperKOOL recommends plugging the unit into a surge protector or power conditioner in order to protect your system. As outlined in our terms and conditions, power surges and spikes are not covered under warranty.

#### WE RECOMMEND THAT YOU DO NOT USE A GROUND FAULT INTERRUPTER (GFI) WITH THIS PRODUCT.

#### **Test Preparation Procedure**

- 1. Remove unit from box
- 2. Place unit on tabletop
- 3. Plug unit into an electrical outlet
- 4. Plug in bottle sensor
- 5. Turn on to test (temperature differential should be 10°F across coils)
- 6. Turn off after test
- 7. Remove bottle probe

#### **Testing the Unit**

Place the WhisperKOOL system on a tabletop to prepare it for installation and testing. Plug the unit into a live electrical outlet and turn it on. The unit may take up to 10 to 15 minutes before running cool. Once the operation has been tested, turn the unit off and unplug it from the electrical outlet.

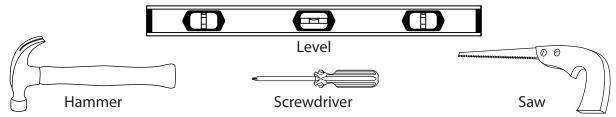
Units weigh 50 pounds and are cumbersome for one person to carry. We recommend that you get someone else to help you during the installation process. **NEVER LAY UNIT ON ITS SIDE.** 

If the system does not seem to be running cool after 15 minutes, please refer to the Troubleshooting Guide on page 23.

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#### PREPARING THE INSTALLATION LOCATION

#### **Minimum Tools Needed**



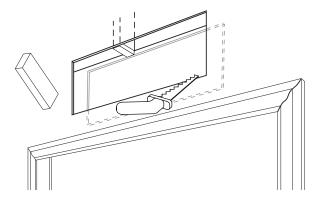
**Note:** The following installation examples are for reference only. Door header construction and framing may vary. When not installing above a door, you must have adequate framing inside of the wall. WhisperKOOL recommends consulting a licensed contractor for framing and construction needs.

#### STEP 1

Locate the desired installation location. Using a level and a pencil, mark the center line. Outline a rectangle  $10^{3}4''$  by  $22^{1}/2''$  where the unit will be placed into the wall.

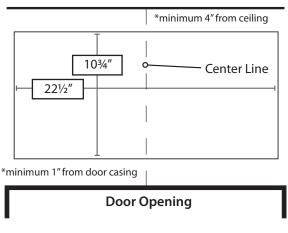
#### STEP 2

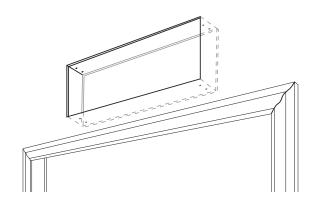
Using a saw, cut the hole in the drywall and wall stud(s). Be careful not to cut into any electrical lines or plumbing.



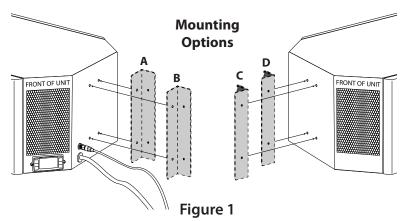
#### STEP 3

In most cases, framing will need to be added to provide adequate support for the unit and mounting bracket.



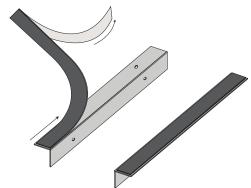


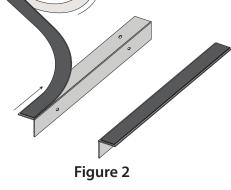
## **INSTALLATION**



#### STEP 4

Determine which of the four bracket mounting options (displayed in Figure 1) will be the most suitable for the desired position of the cooling unit.





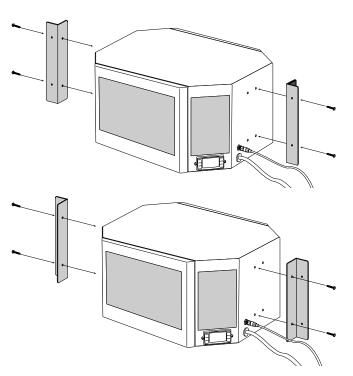


#### STEP 5

Foam tape needs to be placed on bracket surfaces which will be in direct contact with the wall.

If the desired option is (A) or (B) displayed in Figure 1, the foam tape should be placed as shown in Figure 2.

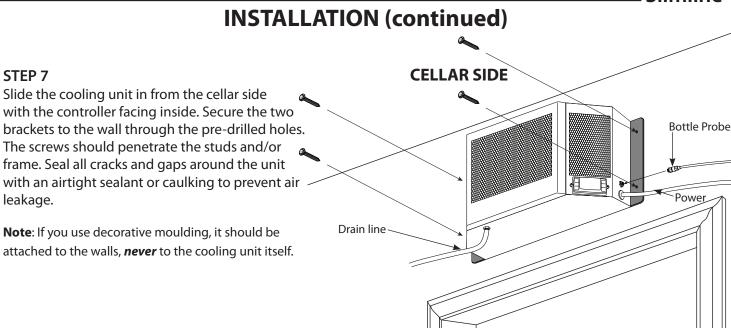
If the desired option is (C) or (D) displayed in Figure 1, the foam tape should be placed as shown in Figure 3.



#### STEP 6

Secure each bracket to the corresponding side of the cooling unit as shown.

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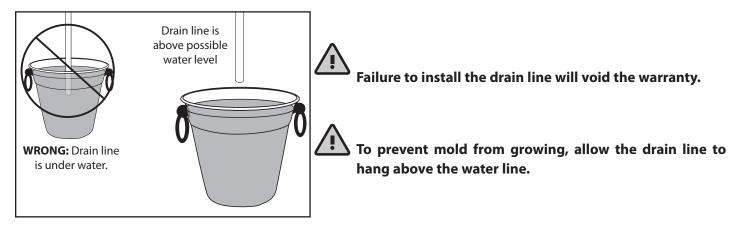


#### Attach the condensate drain line

STEP 8

The condensation drain line tube is used to remove excess condensation from the unit to a proper discharge location. It is important that the drain line tube be properly connected to prevent leakage and other problems associated with excess condensation.

**Note:** To prevent mold from growing, allow the drain line to hang above the water line.



#### STEP 9

If removed, reinstall the grilles on both sides of the unit and plug in the power cord. The use of an extension cord is not recommended.



## **LIQUID-MEASURING THERMOSTAT SYSTEM (BOTTLE PROBE)**

WhisperKOOL cooling units come with a liquid-temperature-measuring thermostat. The self-calibrating bottle probe contains a sensor which communicates back and forth with the thermostat. This results in a consistent temperature setting and accuracy. Wine should be kept at a very precise, controlled temperature and humidity. By measuring the liquid temperature rather than air, the unit will operate 75–80% of the time.

#### **Setting up the Bottle Probe:**

- 1. Locate an empty wine bottle.
- 2. Fill it 75% full with room-temperature tap water.
- 3. Place bottle probe securely into bottle as seen in Figure 1.
- 4. Place bottle off to the side of the unit in your wine cellar, with the probe level.

5. To ensure a consistent temperature, place bottle probe approximately three (3) feet away from the air output and not in the flow of the air.

It is recommended that the bottle be placed in a central location of your wine cellar. Avoid pulling too much on the probe cord. It may become disconnected, resulting in limited functionality of the unit.

Note: The controller can be set between 45-67°F.

**Remember:** The WhisperKOOL unit operates based on the temperature of the water.

Do not be misled by thermostats reading air temperature. The air temperature in the cellar will be cooler than the liquid temperature of the wine while it is reaching the optimum balanced temperature.



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#### SYSTEM OPERATION

#### **Initial Startup**

When power is applied to the unit, the snowflake symbol will be displayed (if unit is calling for cooling). There may be a delay of up to 60 seconds before to the evaporator fan turns on. When the evaporator fan is activated, the fan symbol will be displayed.

APST (Advance Product Safety Technology) is a temperature control feature for the evaporator fan that comes standard with all WhisperKOOL units. APST ensures that, in the event of a cooling deficiency, the heat from the indoor fan will not raise the temperature of the wine cellar, which could otherwise have an adverse effect on the wine-aging process.

#### **Set Point**

The set point is preset at the factory at 55°F. It can be adjusted by the customer between 45–67°F in one-degree increments.

#### **Anti-Short Cycle**

The Anti-Short Cycle ensures that the compressor will remain off for a period of three minutes after the unit has reached the set point to allow the pressure in the refrigeration unit to equalize prior to starting the compressor.

#### **Anti-Frost Cycle (defrost)**

When the evaporator probe senses a temperature of 25°F for five minutes, the unit will start an Anti-Frost Cycle. This will shut down the compressor and allow the evaporator and condenser fans to run to evaporate any frost accumulation on the coil. The compressor will remain off until the evaporator coil reaches 40°F, or for a maximum of ten minutes. The unit will then return to normal operation.

#### **Bottle Probe Failure Protection**

In the event that a bottle probe should fail, the APST (Advance Product Safety Technology) will automatically transition the refrigeration compressor cycles to a pre-determined time series (based on detailed laboratory testing), which will ensure that the product is kept within a safe temperature range.

#### Display

The bottle probe temperature is displayed by default. "Def" is displayed during an Anti-Frost Cycle. The air-sensing probe and evaporator probe temperatures can be accessed by pushing the SET button and scrolling through "PB1" (bottle probe), and "PB2" (evaporator probe).

#### **Safety Features**

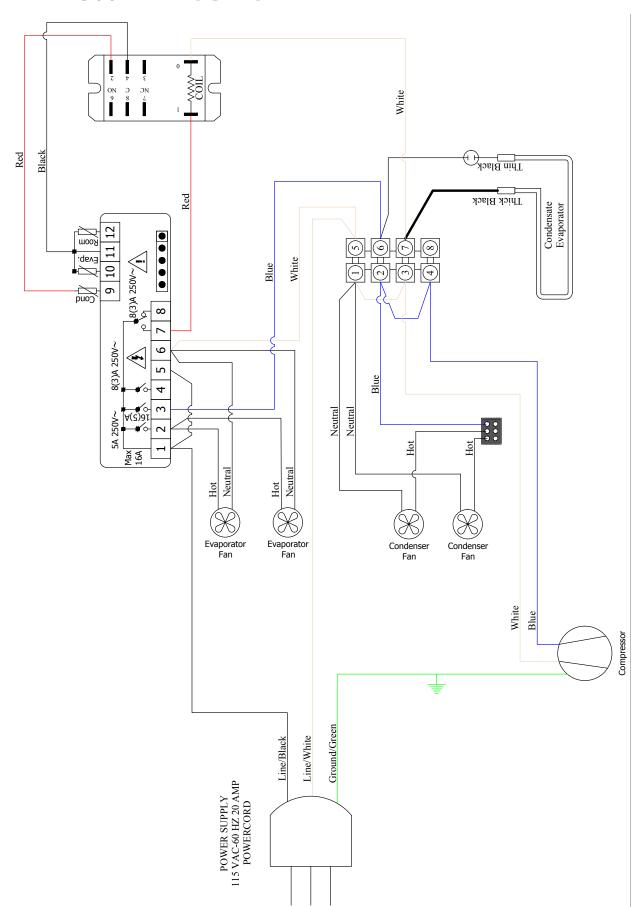
Once the compressor relay is de-energized the controller must wait five minutes before reenergizing the relay. This prevents the compressor from repeatedly turning off and on. If the unit is calling for cooling during this time, the compressor symbol will blink, indicating that cooling is needed but the control is waiting for the Anti-Short Cycle delay.

In the event of a faulty bottle probe, the compressor will cycle off for 10 minutes and on for 40 minutes. "P1" will be displayed on the screen.

#### **Alarms**

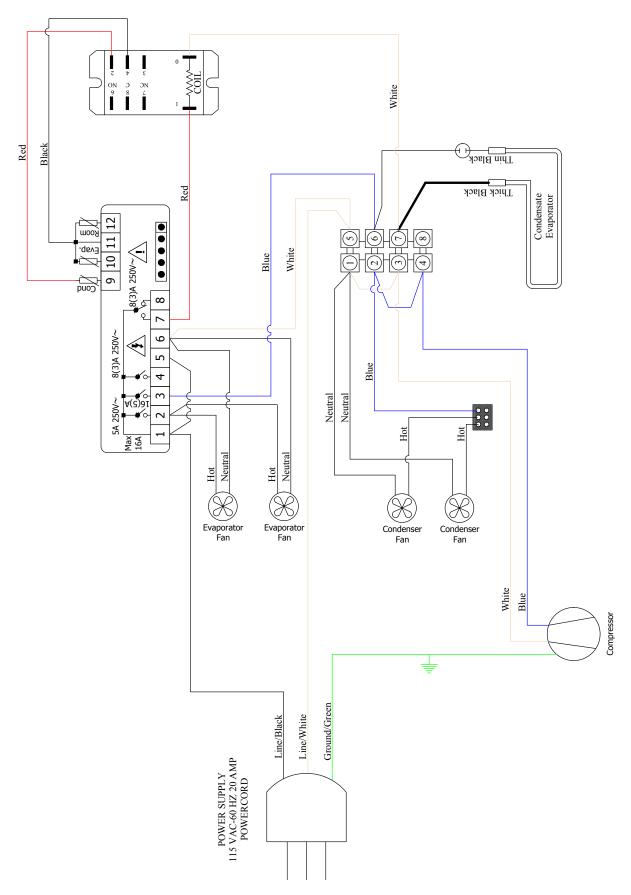
See "Alarm Codes" in the Controller Functions chart.

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## **SLIMLINE 3300 WIRING DIAGRAM**



# Whisper**KOOL**™\_\_\_\_\_CONTROLLER FUNCTIONS

Energy Reduction

Display



High Temp/Pre-Chill

**Low Temp** 

	Oisplay SET ON/OFF WhisperKOOL ON/OFF	
Button/Symbol	Normal Functions	
ON/OFF	The ON/OFF button allows the customer the convenience of turning the refrigeration system on or off from the control panel. This feature does not disconnect power from the unit. In order for the power to be shut off from the unit, the power cord must be unplugged from the wall outlet. Press the ON/OFF button once to turn the unit on or off.	
UP/DOWN ARROWS	Use these buttons to scroll up or down the CPSM (Customer Preference Selection Mode) menu. They can also display the highest and lowest temperatures sensed by the bottle probe. It can be easily reset to reflect current temperatures.  1. Press the UP ARROW or the DOWN ARROW once and the highest or lowest temperature (Hi/Lo) sensed by the bottle probe will be displayed.  2. To reset the Hi/Lo, press and hold the SET button when the Hi/Lo value is displayed on the digital display. Continue to hold the SET button until "rSt" appears on the digital display and then blinks. This will erase the past recorded "Temperature Data History" and start recording from the current time and temperature.  3. The Hi/Lo feature should be reset at initial startup and after the cellar or cabinet has reached its normal operating temperature, generally 55°F.	
CELLAR PRE-CHILL (CPC)	The CPC Feature is activated by pressing the UP ARROW button for 3-5 seconds. The CPC logo (a snowflake with an arrow around it) will appear on the digital display. The CPC feature can be terminated by pressing the UP ARROW for 3-5 seconds. The feature will self-terminate after 6 hours.  The CPC feature may be used to pre-chill the cellar prior to loading it with warm product. Once the feature is activated, the system will run for the next 6 hours regardless of the temperature inside the wine cellar. After the 6-hour time period expires, the set point will automatically return to the original set point of 55°F (or whatever the customer has set). The CPC feature can be conveniently adjusted to the customer's specific needs by accessing "Customer Preference Select Mode" (CPSM). See CPSM instructions on page 20.	
ENERGY REDUCTION (ER)	The ER feature is activated by pressing the ER button once. The ER logo (a sun and crescent moon) will appear on the digital display. The purpose of the ER feature is to reduce energy cost by shifting the set point up. This allows the cooling system to run for shorter periods of time, resulting in a reduction in energy cost. The ER feature allows for energy savings during high ambient temperatures, vacations, or business travel.  To deactivate the ER feature, press the ER button one time, and the ER logo will turn off. The ER feature can be conveniently adjusted specific need by accessing the "Customer Preference Select Mode" (CPSM) menu. See CPSM instructions on page 20.	

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#### **SET BUTTON**

#### SET

- 1. Press the SET button once to view the set point. After approximately 5 seconds, the display will return to normal operation and display the bottle probe temperature.
- 2. Press and hold the SET button for 3-5 seconds until the set point is displayed and the °F symbol starts blinking. Next press the UP or DOWN ARROW buttons to change the set point. Next press the SET button once and the set point and °F symbol on the display will blink to confirm the new set point.
- 3. Press and hold the SET button during the display of the Hi/Lo temperature data until "rSt" blinks on display. This will erase any recorded data and start recording from the current time and temperature onward.
- 4. Press the SET and DOWN ARROW buttons simultaneously for 10-15 seconds and you will access Customer Preference Selection Mode (CPSM). This menu allows the customer to fine-tune their unit's controls. See more details about CPSM on the next page.

#### ANTI-FROST CYCLE



AUX

The Anti-Frost Cycle is automatically activated when the evaporator temperature registers 25° for five minutes. During this cycle, the compressor and condenser fans will turn off and the evaporator fans will continue to run in order to melt the ice on the coils. Once the temperature of the evaporator gets back up to 40°F, the cycle will deactivate and the system will revert back to normal operating conditions.

At the beginning of the cycle, the **AUX** symbol will be illuminated and the symbol will flash. The symbol will be steadily illuminated during the Anti-Frost Cycle.

#### **ALARM**



The alarm symbol is shown when the system encounters an issue that needs attention. Alarm codes are explained below.

#### **Alarm Codes**

Message	Cause	Solution
	Bottle probe is unplugged	Attach bottle probe to unit
"P1"	Faulty bottle probe connection	Check bottle probe attachment at circular connector     Check bottle probe connection at green terminal block on back of controller
	Defective bottle probe	Replace the bottle probe
"P2"	Faulty evaporator probe connection	Check evaporator probe connection at green terminal block on back of controller
	Defective evaporator probe	Replace the evaporator probe
"HA"	Faulty controller	Contact Customer Service at 1-800-343-9463
"LA"	The bottle probe is sensing a temperature of 4° below the set point	Allow the room to warm up, which will increase the temperature of the wine
	Defective bottle probe	Replace the bottle probe
"POF"	The controller is locked	Hold UP and DOWN ARROW buttons for 3 to 5 seconds to disable. "PON" should appear.



# CUSTOMER PREFERENCE SELECTION MODE

Customer Preference Selection Mode (CPSM) permits customers to fine-tune their unit's operating system. The CPSM menu is accessed by pressing the SET and DOWN ARROW buttons simultaneously for **10-15 seconds**.

The following CPSM options are available in the menu:

**FOn – Humidity Management Enhancement ("fan on"):** The "fan on" time is preset to zero minutes. If, however, you wish to raise the Humidity Management Enhancement of your wine cellar, you can increase the duration of the "fan on" cycle in increments of five (5, 10, or 15 minutes). After making any adjustment to the "fan on" cycle, **you should wait a minimum of 3 days** before making any additional adjustments. This will allow the cellar sufficient time to acclimate to the new Humidity Management Enhancement setting.

**FOF - Humidity Management Enhancement ("fan off"):** This setting controls how long the fan stays off after the set point has been reached. It is preset at 15 minutes. This setting should not be adjusted, as most properly constructed wine cellars retain an ample amount of humidity during the "fan off" cycle. If, however, you wish to decrease the duration of the "fan off" cycle, you can adjust this setting in the CPSM menu.

**CCs – Cellar Pre-Chill Set Point:** This parameter is preset at 52°F, but can be adjusted to a set point between 45°F- 67°F.

**CCt – Cellar Pre-Chill Duration:** This option is normally set at 6 hours, but can be set by the customer for 0 to 23.5 hours.

**Con/Cof – "compressor on" and "compressor off" time:** In the event that there is a P1 failure/alarm (see previous page), the compressor/refrigeration system automatically starts a predetermined ON/OFF cycle, which is controlled by the preset "compressor on" and "compressor off" times. The compressor is automatically set to be "on" for 40 minutes, and "off" for 10 minutes . The customer can adjust these ON/OFF times in order to maintain the desired temperature in the wine cellar.

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## **MAINTENANCE SCHEDULE**

Monthly	1. Check for unusual noise or vibration
	2. Check the drain line to see if it is above the waterline (if draining into a vessel)
Quarterly	1. Clean front and rear intake grilles
Annually	1. Use a vacuum with brush attachment to clean grilles
	2. Inspect for corrosion
	3. Check wiring connections and integrity of cords
	4. Pour a 50/50 bleach solution into the drain line every spring



## **NOTES**

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## **TROUBLESHOOTING GUIDE**

Possible Cause	Solution
Evaporator coil is dirty	Clean coil with a vacuum. If coil is very dirty, use a spray bottle with a small amount of liquid dish detergent or coil cleaner. Spray coil, le sit for five minutes, then flush with fresh water.
There is something blocking the supply and/or return air	Remove blockage
One or both evaporator fans are not turning on	Call a service tech to troubleshoot
The temperature of the room to which the unit is exhausting has dropped below 50°F	Raise the temperature of the exhaust room
The unit has not gone through an Anti-Frost Cycle yet	Check for ice in the depth of the coil. Melt with a blow drier until co is warm to the touch. Soak up water with a towel.
If unit continues to ice	Observe ice formation pattern. If only part way up the coil face, unit could be low on refrigerant. If so, call Customer Service at 1-800-34: 9463.
Unit does not run/power up	
Possible Cause	Solution
Unit is not plugged in	Make sure the unit is plugged into an outlet
Power switch not on	Turn unit on by pressing the power button on the control
Line voltage rating is incorrect for the system	Check line voltage to make sure it is 110V-120V
Room temperature equals the set point on the controller	Lower set point
Thermostat not calling for cooling	Lower set point
Faulty thermostat or wiring	Call Customer Service at 1-800-343-9463
Cellar temperature is too warm	
Possible Cause	Solution
The temperature of the room to which the unit is exhausting exceeds 85°F	Intake temperature must drop below 85°F
The unit is undersized for the room	Order correctly sized unit
There is something blocking the supply and/or return air on evaporator or condenser side of the unit	Remove airflow obstruction
Unit is mounted too low in the room	Relocate unit so the distance from the ceiling and top of the unit is no more than 18 inches
One or more of the fans is not turning on	Call Customer Service at 1-800-343-9463
Compressor is not turning on	Call Customer Service at 1-800-343-9463
Compressor keeps cycling on overload	Make sure all fans are working and there is no airflow obstruction
Poor seal around door	Make sure there are no air gaps around the door. If door seal is damaged, replace it.
C + 1 + 1 + 1 + 1	Lower the set point
Set point too high	
Set point too high  Evaporator coil is frosted or iced up	
· · · · · ·	Observe ice formation pattern. If only part way up the coil face, the unit could be low on refrigerant. If so, contact your installing technician to assist with troubleshooting.
Evaporator coil is frosted or iced up	unit could be low on refrigerant. If so, contact your installing technic



## **TROUBLESHOOTING GUIDE**

Unit leaks water	
Possible Cause	Solution
Unit is not level	Unit should be level in wall to prevent leaking
Drain line clogged or kinked	Check drain line to make sure water can flow freely
Drain is clogged, preventing water from escaping	Disconnect drain and clear it out
Drain line does not have a downward slope	Fix drain line so there is a downward slope from the unit to the drain
Coil is iced, causing drain pan to freeze and water to overflow	Melt ice with blow drier. Soak up with a towel.
Unit runs but does not cool	
Possible Cause	Solution
Lack of airflow	Make sure fan is unobstructed; clean evaporator if necessary
Compressor not running	Contact Customer Service at 1-800-343-9463
System undersized	Contact Customer Service at 1-800-343-9463
Compressor is overheating	Shut system off for 1 hour to allow compressor to cool. Turn back on and check for cooler airflow out. If compressor runs, check for and clean condenser coil as possible cause of compressor overheating. If problem repeats, contact Customer Service at 1-800-343-9463.
<b>Evaporator fan runs but compressor does</b>	not
Possible Cause	Solution
Compressor and/or starting components faulty	Contact Customer Service at 1-800-343-9463
Compressor is overheating	Shut system off for 1 hour to allow compressor to cool. Turn back on and check for cooler airflow out. If compressor runs, check for and clean condenser coil as possible cause of compressor overheating. If problem repeats, contact Customer Service at 1-800-343-9463.
Compressor runs but evaporator fan does	s not
Possible Cause	Solution
Faulty fan motor	Contact Customer Service at 1-800-343-9463
Faulty fan relay	Contact Customer Service at 1-800-343-9463
Compressor short-cycles	
Possible Cause	Solution
Evaporator fans blow on bottle probe	Move bottle probe to a more central location
Unit low on refrigerant charge	Call Customer Service at 1-800-343-9463
Condensing fan motor/capacitor faulty	Call Customer Service at 1-800-343-9463
Compressor and/or starting components faulty	Call Customer Service at 1-800-343-9463
Humidity in cellar too high	
Possible Cause	Solution
Cellar vapor not sufficient	Install proper vapor barrier
•	

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#### TECHNICAL ASSISTANCE

WhisperKOOL Customer Service is available Monday through Friday from 6:00 a.m. to 4:00 p.m. Pacific Standard Time.

Your customer service representative will be able to assist you with your questions and warranty information more effectively if you provide them with the following:

- The model and serial number of your WhisperKOOL system(s).
- Location of unit and installation details, such as ventilation, ducting, construction of your wine cellar, and room size.
- Photos of the cellar and installation location may be needed.

#### **Contact WhisperKOOL Customer Service**

1738 E. Alpine Ave Stockton, CA, 95205 www.whisperkool.com

Email: support@whisperkool.com

**Phone:** 209-466-9463

**US Toll Free:** 1-800-343-9463

Fax: 209-466-4606

#### **ACCESSORIES FOR COOLING UNITS**

WhisperKOOL offers accessories to enhance and customize your Slimline wine cooling unit.

#### **ThruWall Room to Room Fan**

The ThruWall™ Room to Room Fan balances temperatures in adjoining rooms by transferring warm air out of exhaust room quietly and efficiently. Simple to install in any frame wall from 3½″ to 6¾″ thick. A high quality Thermally Protected motor with balanced fan blade moves up to 200 CFM. Move heated or cooled air between rooms.

#### **Condensate Pump Kit**

The condensate pump kit is designed as an automatic condensate removal pump for water dripping out of our cooling units' drain line. The pump is controlled by a float/switch mechanism that turns the pump on when approximately  $2\frac{1}{4}$ " of water collects in the tank, and automatically switches off when the tank drains to approximately  $1\frac{1}{4}$ ". The condensate pump kit allows the excess condensate to be pumped up to 20 feet away from the unit.

Accessories can be purchase at www.whisperkool.com



## PRODUCT WARRANTY INFORMATION

## WhisperKOOL Product Terms and Conditions Including Product Limited Warranty And Product Installation Requirements For WhisperKOOL Extreme Series

ATTENTION: PLEASE READ THESE TERMS OF USE CAREFULLY BEFORE INSTALLING YOUR WHISPERKOOL COOLING SYSTEM. INSTALLING YOUR WHISPERKOOL COOLING SYSTEM INDICATES THAT YOU ACCEPT AND AGREE TO EACH OF THE TERMS AND CONDITIONS SET FORTH HEREIN ("TERMS OF USE"). IF YOU DO NOT ACCEPT THESE TERMS OF USE, YOU RISK VOIDING YOUR WARRANTY AND ASSUMING ADDITIONAL REPAIR AND REPLACEMENT COSTS.

Purchase of a WhisperKOOL Cooling System assumes that the Purchaser ("End User") fully accepts and
agrees to the Terms and Conditions set forth in this document. The Terms and Conditions of Sale and
Owner's Manual are shipped with each unit and, if another copy is needed, replacement copies can be
downloaded from the company website (whisperkool.com) or by contacting WhisperKOOL directly for a
new copy. WhisperKOOL reserves the right, in its sole discretion, to change its Terms and Conditions at any
time, for any reason, without notice.

#### 2. WhisperKOOL Product Limited Warranty:

- A. Two (2) Year Limited Warranty: For the period of TWO (2) YEARS (the "Limited Warranty Period") from the date of original sale of a Product by WhisperKOOL, if a WhisperKOOL Product is found to be defective in material or workmanship after undergoing WhisperKOOL's Customer Service troubleshooting, then, subject to the WhisperKOOL Product Limited Warranty Limitations and Exclusions as well as the other Terms and Conditions stated herein, WhisperKOOL will do the following, as appropriate, for the end user ("End User") who has installed and is actually using the Product, with regard to LABOR, PARTS and FREIGHT:
  - 1. **LABOR** Repair or replace (at WhisperKOOL's sole option) the Product to the End User; and
  - 2. **PARTS** Supply to the End User, new or rebuilt replacement parts for the Product in exchange for the return of defective parts; and
  - 3. **FREIGHT** Cover normal ground freight charges for parts, and, in the event the Product is not repairable in the field, cover normal ground freight charges (within the continental United States) for the repair or replacement of the Product.
- B. Five (5) Year Compressor Limited Warranty: WhisperKOOL Products' compressor only will be covered for five (5) years from date of purchase. Labor and freight of the compressor is the End Users responsibility.
- C. Product Warranty Limitations and Exclusions:
  - 1. This limited warranty does not cover cosmetic damage caused during installation, damage due to acts of God, commercial use, accident, misuse, abuse, negligence, or modification to any part of the Product. Delivery and installation of the Product, any additional parts required, as well as removal of the Product if warranty work is required, are all at the sole cost, risk and obligation of the End User.
  - 2. This limited warranty does not cover damage due to improper installation or operation or lack of proper maintenance of the Product, connection of the Product to improper voltage supply, or attempted repair of the Product by anyone other than a technician approved by WhisperKOOL to service the Product.
  - 3. This limited warranty does not cover any Product sold "AS IS" or "WITH ALL FAULTS."
  - 4. Product that has been replaced during warranty period does not extend the warranty period past the original date of purchase.
  - 5. (5) This limited warranty is valid only in the continental United States. Sales elsewhere are excluded from this warranty.
  - 6. Proof of purchase of the Product in the form of a bill of sale, receipted invoice or serial number, which is evidence that the Product is within the Limited Warranty Period, must be presented by the End User to WhisperKOOL in order to obtain limited warranty service.
  - 7. This limited warranty is void if the factory applied serial number has been altered or removed from the Product.

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- 8. This limited warranty is voided if installed in an enclosure of insufficient design that does not follow the Product installation requirements stated herein and in the Owner's Manual.
- 9. Removing the rivets from the Product's unit housing without prior authorization from WhisperKOOL voids this limited warranty.
- 10. The End User must first contact WhisperKOOL Customer Service by telephone (at 1-800-343-9463) prior to attempting service on any Product still under the limited warranty; else the limited warranty is voided.
- 11. This limited warranty does not cover Product being concealed by, but not limited to; vegetation, fabric, shelving, mud, snow, or dirt. Product must not be painted or limited warranty will be void.
- 12. This limited warranty does not cover exposure to corroding environments such as, but not limited to; petroleum and gasoline products, cleaning solvents, caustic pool chemicals, and marine air.
- 13. This limited warranty does not cover any cause not relating to Product defect.
- 14. THE REPAIR OR REPLACEMENT OF THE PRODUCT AS PROVIDED UNDER THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF YOU, THE END USER, AS WELL AS ANYONE ELSE IN THE CHAIN OF TITLE OF THE PRODUCT, DOES NOT START A NEW LIMITED WARRANTY TIME PERIOD, AND IS IN LIEU OF ALL OTHER WARRANTIES (EXPRESS OR IMPLIED) WITH REGARD TO THE PRODUCT. IN NO EVENT SHALL WHISPERKOOL BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, SPECIAL OR CONTINGENT DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY EXPRESSLY DISCLAIMED. Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This limited warranty gives you specific legal rights, and you may have other rights, which vary from state to state.
- 15. Failure of the End User to comply with all of the Product Installation Requirements, Maintenance Requirements and End User Requirements may, at WhisperKOOL's sole discretion, void this limited warranty.
- 16. No one has any authority to add to or vary the limited warranty on this Product.

#### 3. Product Installation Requirements:

- A. Prior to installing a WhisperKOOL Product, the End User must read the WhisperKOOL Owner's Manual and thereafter the End User must follow the required installation, use and maintenance procedures set forth by WhisperKOOL in WhisperKOOL's Owner's Manual. The Owner's Manual is shipped with each Product and if another copy is needed, replacement copies can be downloaded from WhisperKOOL's website (www.whisperkool.com) or by contacting WhisperKOOL directly for a new copy of the Owner's Manual.
- B. It is highly recommended that the End User obtain the assistance of a wine storage professional.
- C. Failing to address all of the variables associated with proper installation will cause the Product to operate incorrectly and limit both the Product's ability to cool and the longevity of the Product itself.
- D. The End User is responsible for all risks and costs of installation of the Product, including but not limited to all labor costs as well as cost of any additional parts required for the proper and complete installation of the Product. The End User is responsible for all risks and costs of removing the Product if limited warranty work is required.
- E. The Product cannot operate at its optimum capacity if airflow is constricted by ducting or venting the exhaust side of the Product into a location with inadequate ventilation.

#### 4. Maintenance Requirements

It is the End User's responsibility to clean off any accumulated dust, lint, or other debris from the front and rear intake grills. Failure to do this on a regular basis will restrict the airflow and may affect the Product's ability to function properly. Periodically cleaning the Product's vents will help assure maximum cooling efficiency. The drain line tube must also be checked and kept clean and free of debris and mold to maintain proper performance.

Mold is a natural living organism in the environment. It exists in the air in the form of microscopic spores that move in and out of buildings through doors, windows, vents, HVAC systems and anywhere else that air enters. Once it is discovered, mold must be addressed quickly and appropriately. Delayed or improper treatment of mold issues can result in costly and reoccurring repairs. If the End User suspects a mold problem, it is always best to hire a qualified and experienced mold remediation specialist.

#### 5. Additional End User Costs And Responsibilities

The following items are not covered under any warranty and are the sole responsibility of the End User:

- A. End Users should satisfy themselves that the Product they are purchasing is suitable for their particular needs and requirements, and thus no responsibility will be placed with WhisperKOOL for the End User's decisions in this regard.
- B. It is the End User's responsibility to secure safe haven/storage for ANY AND ALL items that are being kept and stored in the End User's wine cellar, including any Product. WhisperKOOL takes no responsibility for the safety and preservation of the aforementioned items in the event that the environment becomes unsuitable to maintain a proper storage environment.
- C. End User is responsible for initial installation costs, including, but not limited to, labor costs and the cost of any additional parts necessary to complete the installation.
- D. End User is responsible for all costs incurred for the installation and/or removal of the Product, or any part thereof, unless such cost has been agreed by WhisperKOOL to be a warranty repair prior to the work being performed.

#### 6. Sales and Use Tax

WhisperKOOL only collects California sales tax for orders shipped within the State of California. WhisperKOOL does not collect sales tax for orders shipped to other states. However, the Purchaser and the End User may be liable to the taxing authority in their state for sales tax and/or use tax on the Product. The Purchaser and the End User should each check with their state's taxing authority for sales and use tax regulations.

#### 7. Customer Service and Troubleshooting

WhisperKOOL's Customer Service department is available to answer any questions or inquiries for End Users regarding a WhisperKOOL Product, as well as to assist in performing basic troubleshooting, Monday through Friday, from 6:00 a.m. to 4:00 p.m. (PST), at 1-800-343-9463. WhisperKOOL Corporation is located at 1738 East Alpine Avenue, Stockton, California 95205.

#### 8. Miscellaneous Terms and Conditions

- A. Return Policy: All return inquiries must be made within thirty (30) calendar days of the original purchase of a Product and are subject to a twenty five percent (25%) restocking fee. Shipping costs are not refundable and the Purchaser is responsible for all return shipping costs (including customs fees and duties, if applicable).
- B. Security Interest: WhisperKOOL retains a security interest in each Product until payment in full.
- C. Construction and Severability: Every provision of these Terms and Conditions shall be construed, to the extent possible, so as to be valid and enforceable. If any provision of these Terms and Conditions is held by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable, such provision will, to the extent so held, be deemed severed from the contract of sale between Purchaser and WhisperKOOL, and all of the other non-severed provisions will remain in full force and effect.
- D. Governing Law/Choice of Forum: The laws of the State of California (without regard for conflicts of law) shall govern the construction and enforcement of the these Terms and Conditions of Sale (Sections 1 through 9 inclusive, including Product Limited Warranty And Product Installation Requirements), and further these Terms and Conditions of Sale shall be interpreted as though drafted jointly by WhisperKOOL and Purchaser. Any dispute will be resolved by the courts in and for the County of San Joaquin, State of California, and all parties, WhisperKOOL, Purchaser and End User, hereby irrevocably submit to the personal jurisdiction of such courts for that purpose. No waiver by WhisperKOOL of any breach or default of the contract of sale (including these Terms and Conditions of Sale) concerning a Product will be deemed to be a waiver of any preceding or subsequent breach or default.
- E. Correction of Errors and Inaccuracies: These Terms and Conditions may contain typographical errors or other errors or inaccuracies. WhisperKOOL reserves the right to correct any errors, inaccuracies or omissions, and to change or update these Terms and Conditions, at any time without prior notice.

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#### 9. Questions, Additional Information And Technical Assistance

A. Questions: If you have any questions regarding these Terms and Conditions or wish to obtain additional information, contact us via phone at 1-800-343-9463 or please send a letter via U.S. Mail to:

Customer Service WhisperKOOL Corporation 1738 E Alpine Ave Stockton, CA 95205

E-mail: support@whisperkool.com Web: www.whisperkool.com

- B. Technical Assistance: WhisperKOOL Customer Service is available Monday through Friday from 6:00 a.m. to 4:00 p.m. (PST). The Customer Service representative will be able to assist you with your questions and warranty information more effectively if you provide them with the following:
  - 1. The model and serial number of your WhisperKOOL UNIT.
  - 2. The location of the system and installation details, such as ventilation, construction of your wine cellar, and room size.

Model	Serial Number	
Installed by	Date	



WhisperKOOL 1738 E. Alpine Ave Stockton, CA 95205 1(800) 343-9463 www.whisperkool.com

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