Extreme tiR
24V THERMOSTAT
CONVERSION KIT
Installation Manual
(RTN400 & XW260K)

24V Thermostat Conversion Kit to be used in conjunction with **Extreme tiR**



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.

Copyright © 2012. WhisperKOOL. All rights reserved.

WhisperKOOL copyrights this manual, the product design, and the design concepts, with all rights reserved. Your rights with regard to the hardware and manual are subject to the restrictions and limitations imposed by the copyright laws of the USA. Under copyright laws, this manual may not be copied, reproduced, translated, transmitted, or reduced to any printed or electronic medium or to any machine-readable form, for any purpose, in whole or in part, without the written consent of WhisperKOOL.

Every effort has been made to ensure that the information in this manual is accurate. WhisperKOOL is not responsible for printing or clerical errors.

WhisperKOOL reserves the right to make corrections or improvements to the information provided and to the related hardware at any time, without notice.

Vinothèque and WhisperKOOL are registered trademarks, and ECE is a trademark of WhisperKOOL. All rights reserved.

Mention of third-party products is for informational purposes only and constitutes neither an endorsement nor a recommendation. WhisperKOOL assumes no liability with regard to the performance or use of these products.

01.04.2017

TABLE OF CONTENTS

Receiving & Inspecting the Kit	3	
Before You Start	4	
24V Thermostat Conversion Kit		
Installation Instructions	5	

INTRODUCTION

Customer Service

Thank you for purchasing a WhisperKOOL 24V Thermostat Conversion Kit. We strive to provide the highest-quality products and the best possible customer service. If you have any questions about your system, please call us at 1-800-343-9463 or visit whisperkool.com.

Using the Manual

This installation manual is intended to provide detailed instructions for the installation of the 24V Thermostat Conversion Kit on the Extreme tiR cooling system. In order to ensure the proper longevity of your cooling unit, the equipment should be installed as outlined in this manual. Please read and review this manual carefully and keep it for future reference.

What is a 24V Thermostat Conversion Kit?

The 24V Thermostat Conversion Kit is a WhisperKOOL product that allows the customer to switch from the provided standard 120V controller to a 24V thermostat of their choosing (i.e. Nest, Ecobee, Honewell etc.)

*Note: 24V Thermostat not provided by WhisperKOOL

How Does the 24V Thermostat Conversion Kit Work?

The 24V Thermostat Conversion Kit allows the customer

the ability to utilize a 24V smart thermostat to control the operation of their WhisperKOOL unit.

Note: 24V Thermostat must be placed inside the wine cellar in a central location, away from direct airflow.

RTN400 Controller



XW260K Controller







Note: WhisperKOOL does not provide technical/customer support for any 24V thermostat. Please contact the manufacturer of your chosen 24V thermostat for troubleshooting.

Page 2 | 1-800-343-9463 24VTCK.Extreme.tiR 081018

STEP 1: RECEIVING & INSPECTING THE KIT

Upon receiving your 24V Thermostat Conversion Kit:

- Inspect the packaging for any obvious signs of damage or mishandling before opening the container.
- Note any discrepancies or visual damage on the bill of lading before signing.
- Review the packing slip to verify contents.
- Check the model number to ensure it is correct.

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

REMEMBER:

- 1. **Inspect the kit before installation**. If damage is found, please contact your distributor or WhisperKOOL Customer Service at 1-800-343-9463.
- 2. Verify that you have received all of the items on the component list below and that the kit corresponds with your specific WhisperKOOL cooling system.
- 3. The system 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.
- 4. WhisperKOOL recommends that all 24V Thermostat Conversion Kits be installed by a certified HVAC-R technician.

Evaporator unit components provided:

- 24V Conversion kit enclosure
- Installation Instructions
- Accessory Kit
- Molex Adapter

Tools needed:

- Wire cutters
- Wire strippers
- Phillips #1 screw driver
- Phillips #2 screw driver
- Flat head screw driver
- Needle nose pliers

Accessory Kit Items:

- Cable tie (x8)
- Cable tie holder (x3)
- Wire nut (x4)
- 7/16 Plug
- 7/16 strain relief
- 5/8 Strain relief
- 3m tape (8 in.)

Components Needed (not included):

- 24V Thermostat
- 18-5 Thermostat wire

After verifying that you have received all of the correct components for your specific system, please keep the 24V Conversion Kit in its original box until you are ready for installation. This will allow you to move the product safely without damaging it. When you are ready to remove the product from the box, refer to the installation instructions. **TIP:** Save your box and all packaging materials. They provide the only safe means of transporting/shipping the unit.

STEP 2: BEFORE YOU START



Shut off power to the evaporator and condensing unit.





Disconnect both the evaporator unit (air handler) and the condensing unit from their power source(s).





WARNING: Failure to disconnect the power may cause electrical shock, which can result in injury or death.



Note: If the unit is hard wired to a dedicated power source, shut off the designated breaker.

- DISCLAIMER -

These instructions are universal for both the RTN400 & XW260K controllers.



If your controller model is **RTN400**, skip the steps labeled XW260K ONLY.



If your controller model is XW260K, skip the steps labeled RTN400 ONLY.

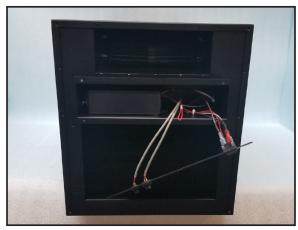
Page 4 | 1-800-343-9463 24VTCK.Extreme.tiR 081018

24V THERMOSTAT CONVERSION KIT INSTALLATION INSTRUCTIONS

Using a #2 Phillips screw driver loosen the screws securing the faceplate to the unit.



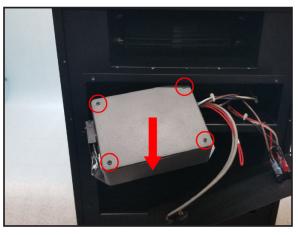
Remove faceplate from unit and allow to hang as shown.



The controller enclosure is secured in the electrical compartment using double coated tape. Use a flat head screw driver to remove the enclosure from unit.



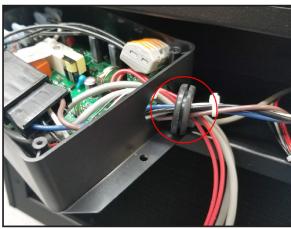
6 Slide enclosure forward and remove lid using #1 Phillips screw driver.



Remove the BOTTLE PROBE and DISPLAY circular connector from the faceplate by loosening the plastic nut counter-clockwise.



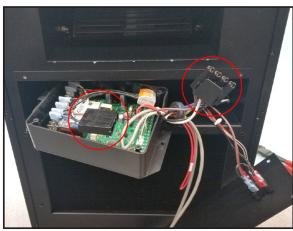
8 RTN400 ONLY
Pop the rubber grommet out of the hole of the enclosure.



9 RTN400 ONLY
Use wire cutters to remove the section of the enclosure highlighted in the photo.



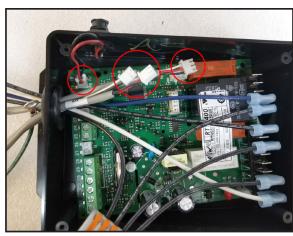
RTN400 ONLY
Unplug Molex connectors and separate the wires.



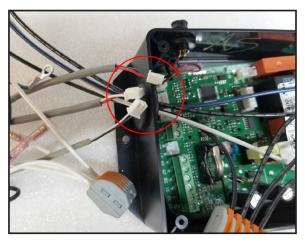
RTN400 ONLY Locate Pb1, Pb2, DI and Display wires.



RTN400 ONLY
Disconnect Pb2, DI, Display, and Pb1 wires from the circuit board.



RTN400 ONLY
Remove the disconnected wires from the enclosure.



XW260K ONLY
Disconnect wires circled in photo from circuit board using needle nose pliers (terminals 3, 4, 14, 15, 16 and 21).



13

XW260K ONLY

Remove the disconnected wires from the enclosure.

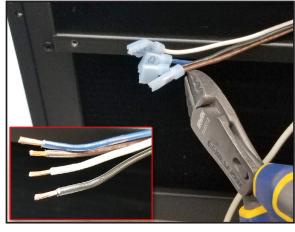


Separate controller assembly from the unit. Controller assembly is no longer needed.



XW260K ONLY
Cut connectors

Cut connectors off previously removed wires shown (blue 14, black 15, white 16, brown 21). Strip wires.

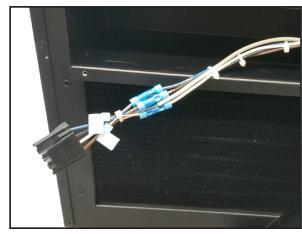


Splice provided connector to wires by color (blue to blue, black to black, white to white, brown to brown).



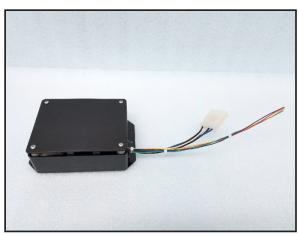
24VTCK.Extreme.tiR 081018

19 XW260K ONLY
Use cable ties to secure wires.



20 Locate the 24V Conversion Kit.

Note: Conversion Kit will be mounted in the same location where the previous controller box was mounted.



Place the provided double-coated tape on the bottom of enclosure.

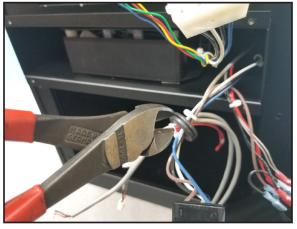


Place 24V Thermostat Conversion Kit enclosure inside electrical compartment.



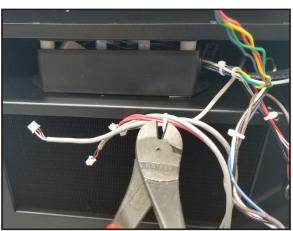
RTN400 ONLY

Remove rubber grommet around wires.

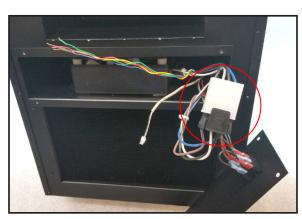


24 RTN400 ONLY

Cut the cable tie securing the previously removed wires. Pb1 wire will remain with unit. Pb1, Display and DI cables are no longer needed.



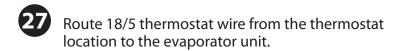
Connect the female Molex from the enclosure with the male Molex from the unit.

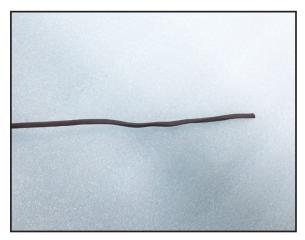


Insert the provided plastic cap into the BOTTLE PROBE hole. Insert provided strain relief into DISPLAY hole.

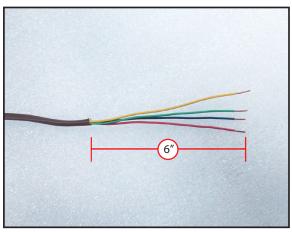
Note: strain relief size will vary depending on model.







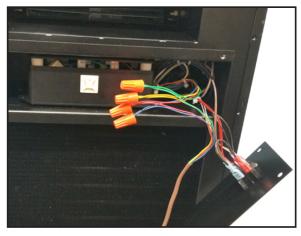
Strip off 6" from the thermostat wire casing. Cut and remove white thermostat wire. Strip off about 1/4" of the blue, red, green and yellow thermostat wire casing to expose the copper.



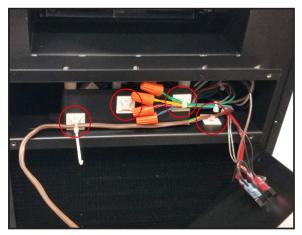
Insert thermostat wire through DISPLAY hole on faceplate.



Connect thermostat wires with the provided wire nuts by color matching red to red, blue to blue, green to green and yellow to yellow.



Install tie mounts in outlined location. Install cable ties to secure wires in place.



Secure the faceplate to the unit using previously removed screws. Conversion process is now complete.



The 24V Thermostat Conversion Kit has been successfully installed.

Page 12 | 1-800-343-9463 24VTCK.Extreme.tiR 081018

Whisper**KOOL**™

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