

Fully Ducted Split Series
24V THERMOSTAT
CONVERSION KIT
Installation Manual
(RTN400 & XW260K)

24V Thermostat Conversion Kit to be used in
conjunction with **Fully Ducted Split Series**

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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INTRODUCTION

Customer Service

Thank you for purchasing a CellarCool 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 CellarCool.com.

Using the Manual

This installation manual is intended to provide detailed instructions for the installation of the 24V Thermostat Conversion Kit on the Fully Ducted Split Series 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 CellarCool product that allows the customer to switch from the provided standard 120V controller to a 24V thermostat of their choosing (i.e. Nest, Ecobee, Honeywell etc.)

*Note: 24V Thermostat not provided by CellarCool

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

RTN400 Controller



XW260K Controller



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

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 CellarCool Customer Service immediately.

REMEMBER:

1. **Inspect the kit before installation.** If damage is found, please contact your distributor or CellarCool 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 CellarCool 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. CellarCool recommends that all 24V Conversion Kits be installed by a certified HVAC-R technician only.

Evaporator unit components provided:

- 24V conversion kit enclosure
- Installation instructions
- Accessory kit

Tools needed:

- Wire cutters
- Wire strippers
- Phillips #1 screw driver
- Phillips #2 screw driver

Accessory kit items:

- Cable tie (x8)
- Cable tie holder (x3)
- Wire nut (x4)

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**.

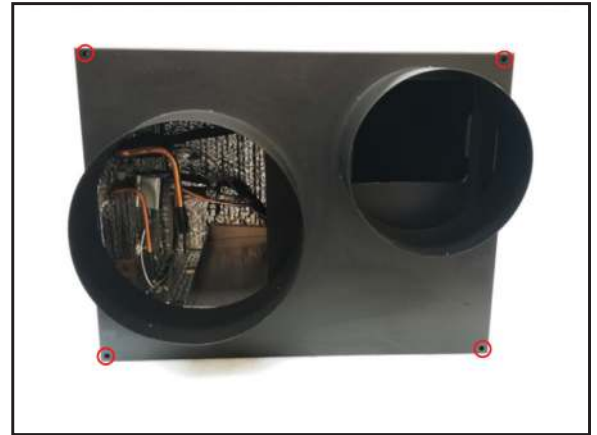


If your controller model is **XW260K**, skip the steps labeled **RTN400 ONLY**.

24V THERMOSTAT CONVERSION KIT INSTALLATION INSTRUCTIONS

- 3** Using a #2 Phillips screw driver, loosen the PEM hardware securing the grille to the base.

Note: Use caution as plenum will not be supported once screws are removed.



- 4** Remove plenum from unit and set aside.



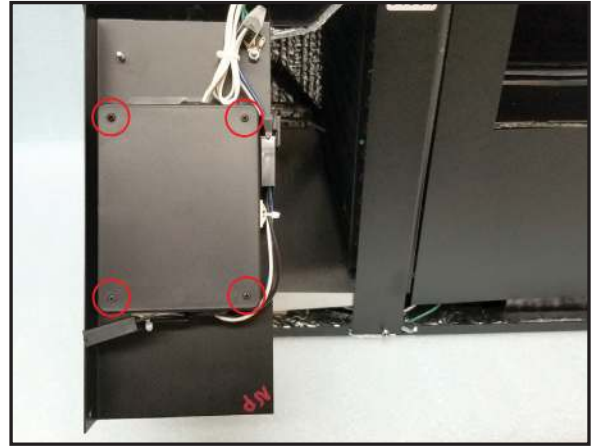
- 5** Remove thumb screw securing electrical panel in place.



- 6** Slide electrical panel down and place hooks in electrical slots to hold in place.



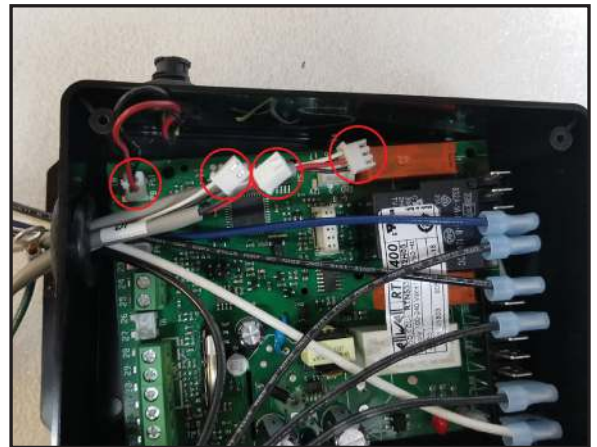
- 7** Remove the 4 screws from the enclosure lid using a #1 Phillips screw driver.



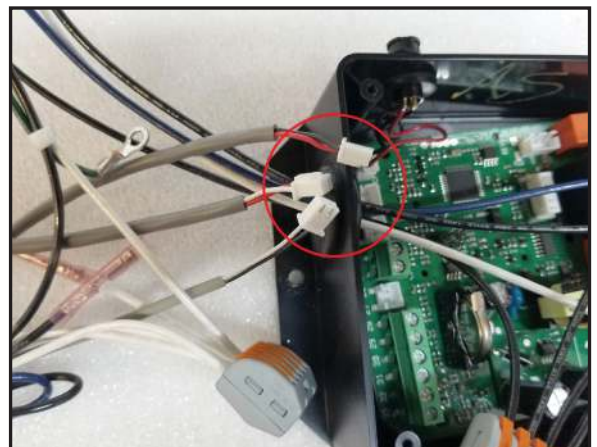
- 8** **RTN400 ONLY**
Locate Pb1, Pb2, DI and Display wires.



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



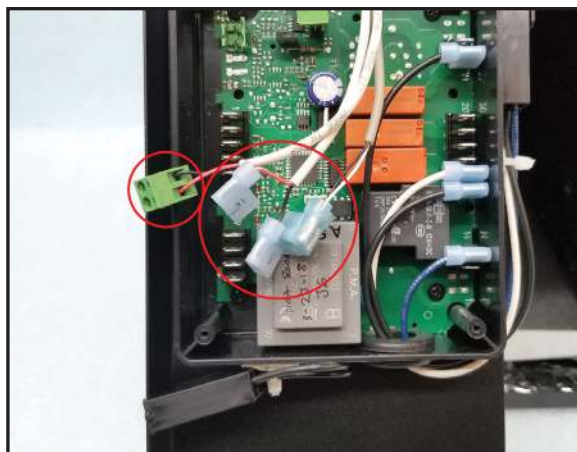
- 10** **RTN400 ONLY**
Remove the disconnected wires from the enclosure.



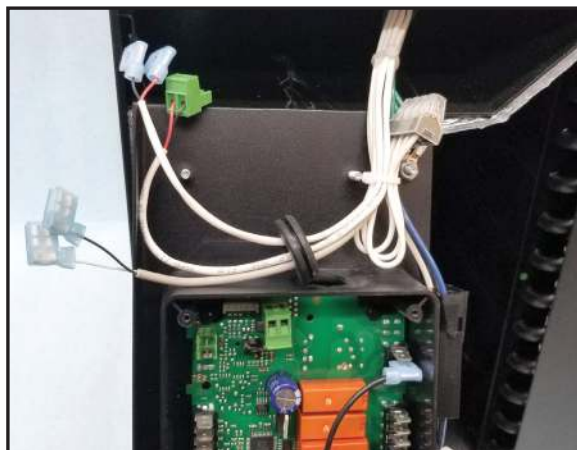
- 11** **XW260K ONLY**
Locate the wires circled in red (pb1, pb2, display wires).



- 12** **XW260K ONLY**
Disconnect Pb1, Display, and Pb2 wires from the circuit board.



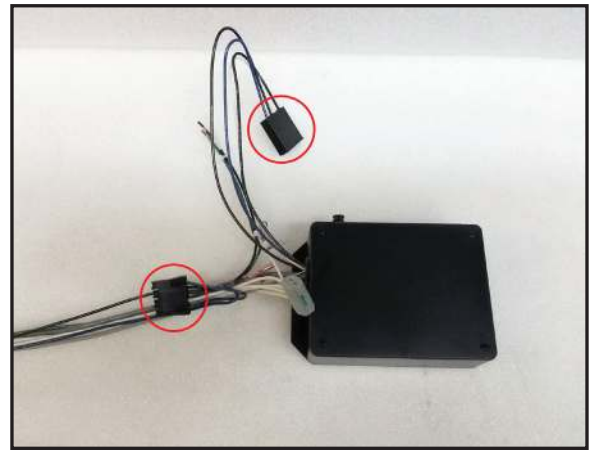
- 13** **XW260K ONLY**
Remove the rubber grommet and disconnected wires from the enclosure.



- 14** **XW260K ONLY**
Use wire cutters to remove the grommet.



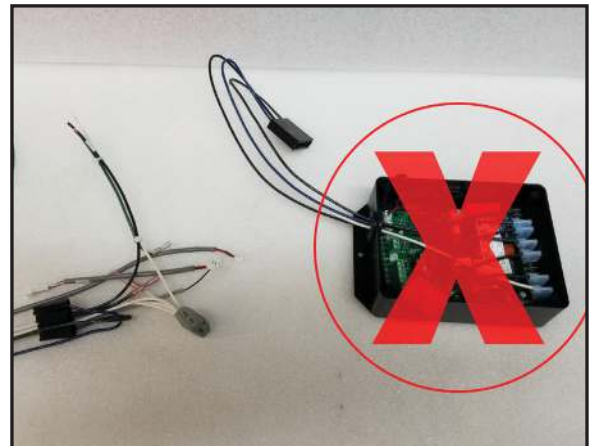
- 15** Unplug Molex connectors and separate the wires.



- 16** Remove the Phillips screws securing the enclosure to the panel using a #2 Phillips screw driver.

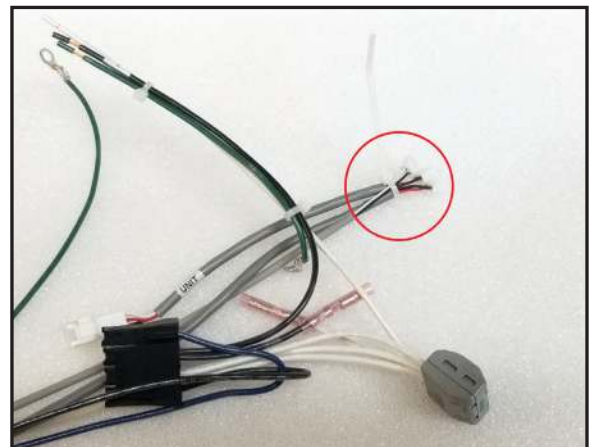


- 17** Separate controller assembly from the unit. Controller assembly is no longer needed.

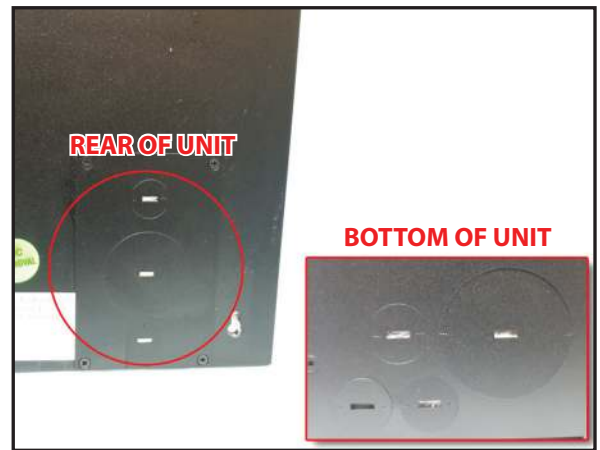


- 18** Isolate previously removed wires and secure with the provided cable tie.

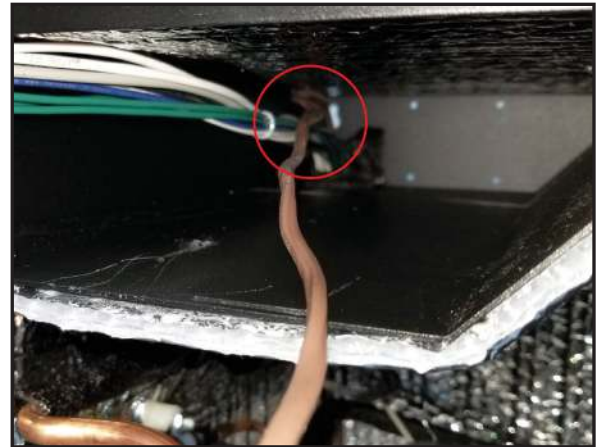
Note: these wires will no longer be used, however, they need to stay with unit.



- 19** Route 18/5 thermostat wire from the thermostat location to the evaporator unit. Insert the wire through one of the knockouts for the line set, electrical or bottle probe.



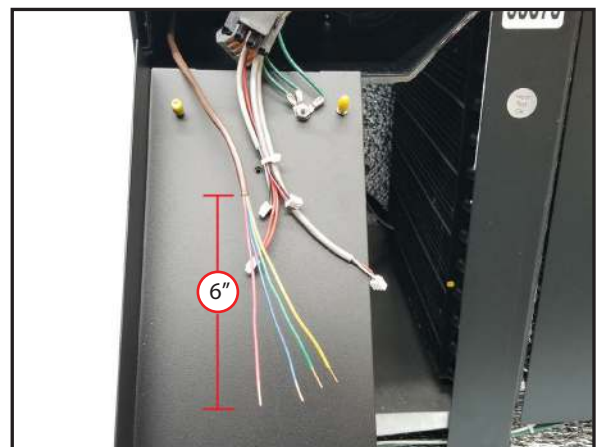
- 20** Route 18/5 thermostat wire into electrical compartment as shown. Note: cork tape will need to be moved aside to slide wire through.



- 21** Route 18/5 thermostat wire down to the location shown on the electrical panel.

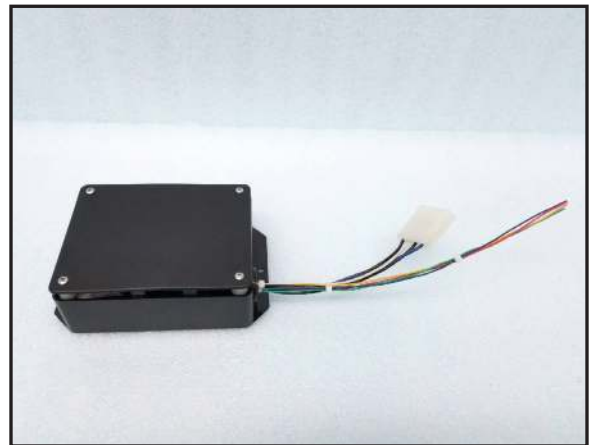


- 22** Strip off 6" from the thermostat wire casing. Cut and remove white thermostat wire. Strip off about 1/4" of the blue, red, green and yellow thermostat wire casing to expose the copper.

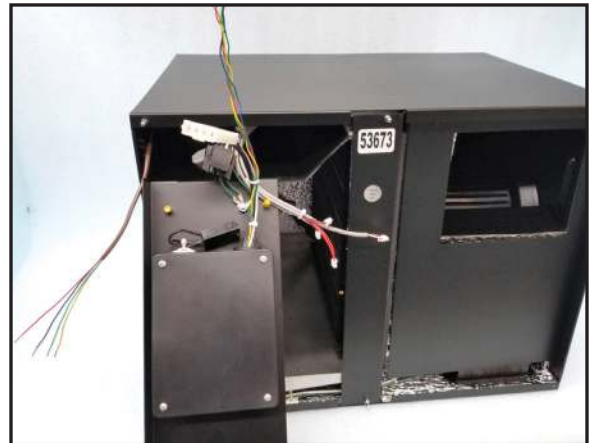


- 23** Locate the 24V Conversion Kit.

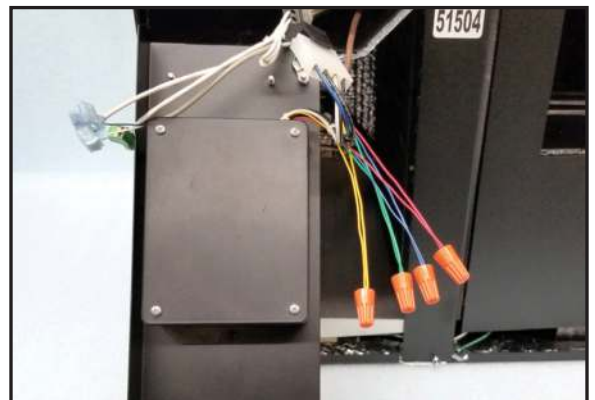
Note: Conversion Kit will be mounted in the same location where the previous controller box was mounted.



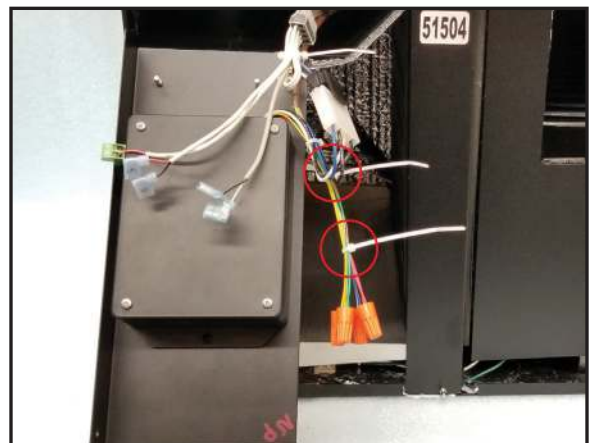
- 24** Mount the 24V Conversion Kit Enclosure in the location shown using the previously removed Phillips screws.



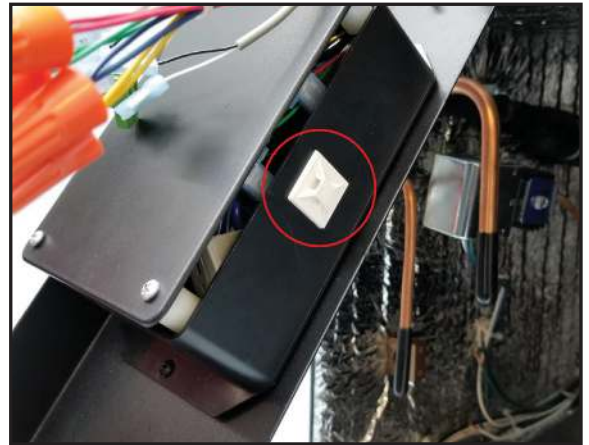
- 25** Connect thermostat wires with the provided wire nuts by color matching red to red, blue to blue, green to green and yellow to yellow.



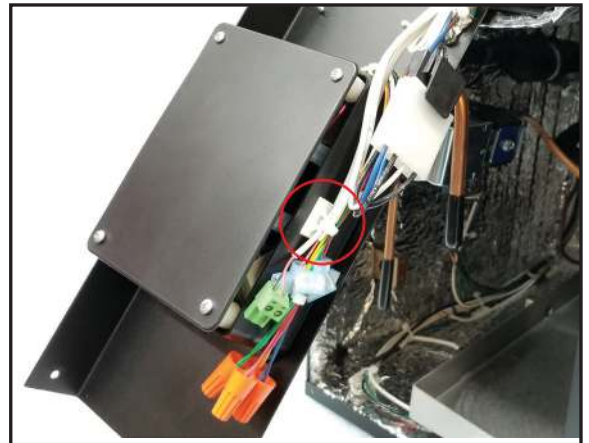
- 26** Secure thermostat wires as shown using cable ties.



- 27** Place the provided adhesive-backed cable tie mount in the location shown on the box.



- 28** Secure wires to cable tie mount using cable tie.



- 29** Slide electrical panel into compartment. Secure wires into electrical compartment.



- 30** Reinstall thumb screw to secure electrical panel in place.



- 31** Reinstall grille. Conversion process is now complete.



The 24V Thermostat Conversion Kit has been successfully installed.

CELLARCOOL

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