

Cooling units with the Networkable Thermostat (“NT”) Upgrade are configured with a unit-mounted temperature display that provides troubleshooting, operational safety controls and defrost cycles. The upgrade also includes 10 feet of 18/5 thermostat wire, which must be connected to a 24VAC Networkable Thermostat.

Compatible NTs

CellarPro has tested and approved the following NT brands/models:

- Ecobee4 Pro
- Nest
- Honeywell / Lyric T6
- Any other 24VAC HVAC Thermostat with power consumption less than 4VA

Installation Instructions

IMPORTANT: CONNECT THE THERMOSTAT WIRE TO THE NT BEFORE CONNECTING POWER TO THE COOLING UNIT.

Install the cooling unit but **DO NOT** connect power the cooling unit. The temperature display on the cooling must be blank, indicating no power is connected to the cooling unit. It is now safe to connect the 18/5 thermostat wire to the NT.

If the NT does not have a remote sensor, the NT must be installed inside the cellar. It is very important to locate the Thermostat in an area that gets good airflow, ideally in a location near the air return to the cooling unit.

If the NT has a remote sensor option, it may be possible to locate the main Thermostat outside the cellar, and the remote thermostat inside the cellar. Make sure to disable the temperature input from the main Thermostat, and control the cellar using the remote sensor. It is very important to locate the remote sensor in an area that gets good airflow, ideally in a location near the air return to the cooling unit.

Connect the color-coded thermostat lead wire to the NT terminals as follows:

- Red wire to terminal “Rc” (24VAC Power Supply)
- Blue wire to terminal “C” (24VAC Common)
- Yellow wire to terminal “Y1” (cooling / compressor)
- Green wire to terminal “G” (cooling unit fan)
- The White wire in the 18/5 thermostat wire harness is not used.

If the Thermostat does not have the terminal markings listed, it will be necessary to contact the Thermostat manufacturer to advise the correct terminal mapping.

Once the wires are connected to the NT, connect power to the cooling unit, and turn “on” the power on the cooling unit’s digital display. The current temperature will show on the digital display. There is a 3-minute delay before the cooling unit will start to run.

Activate the NT and begin initial set up.

Recommended Settings

The following guidelines are general recommendations to optimize the NT for wine cellar applications. It will be necessary to reference the available NT menus and available options from the documentation provided with the NT.

- Set the mode to “Cool Only”
- Disable all scheduling, learning, and occupancy tracking functions. These routines are intended for comfort cooling and are not suitable for long term wine storage applications.
- If the Thermostat has a configurable minimum/maximum set point range, set the minimum to 47°F (or as low as possible) and set the maximum set point to 62°F. This is the safe operating range for CellarPro cooling units.
- Enter the desired cellar set point temperature. The NT will control the cooling unit to manage this set point temperature.
- Set fan to “Auto”.
- Compressor Minimum Off Time: If this setting is disabled by default, it must be enabled, with a minimum off time for CellarPro products of 3 minutes.
- If the Thermostat allows high/low temperature alarms, we recommend the following settings: 40°F (Low) and 70°F (high).
- If the Thermostat has an adjustable temperature differential (cooling on/off range), a setting of 4°F is recommended. Many Thermostats have a tight fixed differential of 1-2°F. In this case the cooling unit will cycle more frequently than recommended. Therefore, it is advisable to set a longer Compressor Minimum Off Time to minimize frequent cycling.
- If the NT has a “Change Air Filter” reminder, set the reminder for every 3 months. This is for inspection and cleaning or replacement of the condenser filter.
- Humidity Management (with Ecobee4 Pro Thermostats:) The humidity level in the cellar can be maximized by allowing the cooling fans to run at the end of every cooling cycle.
- From the NT, access the “Cool Dissipation Time” parameter from Main Menu>Settings>Installation Settings Advanced Options>Thresholds and change “Cool Dissipation Time” from Auto to a recommended value of 180 seconds (3 minutes). The time can be set from 0 to 900 seconds in 30 second increments.

- Humidity Management with Other Thermostats: our NT Update Kit is pre-programmed with a fixed “fan off delay” of 3 minutes. Therefore, at the end of each cooling cycle, the cooling unit fans will continue to run for 3 minutes.

Temperature Display on Cooling Unit

The temperature display provided on the cooling unit enhances the functionality of the NT for wine cellar applications. Alarms trigger an audible alarm only at the cooling unit, the alarms are not communicated through the NT. Consult the cooling unit Owner’s Manual for detailed troubleshooting information related to these alarms.

- The “Set” button has no effect since the set point is managed by the NT.
- The following parameters and functions are not available with the NT configuration: HY, FON, SET, HES, Quick Chill and Energy Saver.
- For self-contained cooling units, high and low ambient temperature alarms (“HA2”/“LA2”) will behave as follows (refer to the cooling unit’s Owner’s Manual for addition information):
 - “HA2” alarm - the compressor will shut down until it cools off.
 - “LA2” alarm - will not shut down the unit and contact CellarPro asap.
- A start up safety delay of 3 minutes is enabled when power is first supplied to the unit, or when recovering from a power failure.
- The defrost cycle will be managed automatically based on the unit configuration. When the cooling unit is in defrost, “DEF” is shown on the display.
- The power button can be used to turn off the compressor. When the display reads “OFF”, the compressor is turned off, however the cooling unit fans may turn on/off based on the call for fans from the NT.
- To completely shut down the system, turn off both the cooling unit and the NT, or disconnect power to the cooling unit.