VT8000 Room Controllers

Frequently Asked Questions

Q1: **Using the uploader software, can I convert my 8350 to an 8650 and vice-versa?**

A1: It is not possible anymore since the new hardware version (firmware v2.0+).

Q2: **Why are the 8350 Cool and Heat outputs simultaneously activated?**

A1: The Dehumidification is activated. If dehumidification is not required, set the "Dehum lockout" parameter to "Disable".

Q3: **Why does the 8350 fan stay in low speed instead of shutting down when there is no demand?**

A1: The "Fan mode" is set to "Low" instead of "Auto".

A2: The "Auto Fan func." is set to "AS". Change the setting to "AS / AD".

A3: The Dehumidification is activated. If dehumidification is not required, set the "Dehum lockout" parameter to "Disable".

Q4: **Why does the 8650 fan stay ON even when there is no demand?**

A1: The "Fan mode" is set to "On" or "Smart". Change the setting to "Auto".

A2: The Dehumidification is activated. If dehumidification is not required, set the "Dehum lockout" parameter to "Disable".

Q5: **Why is the 8650 Modulating output UO11 not modulating?**

A1: The "Heat stages" parameter must be set to 0 (zero) to activate 0-10 Vdc heat on UO11.

A2: The output will stay at 0 Vdc if there is a demand for Cooling or if there is no demand for Heating from the Room nor Supply.

Note: You can use the "Test outputs" page to force a voltage on UO11 (anywhere between 0 and 10 Vdc).

Q6: **Why are the 8650 Heat stages turning ON, but the Fan remaining Off?**

A1: The "Fan cont. heat" parameter is set to "Off". Change the setting to "On".

Q7: **Why is the configuration parameter highlighted in red and not editable?**

A1: The configuration parameter has been overwritten at a higher BACnet priority. This may have been done by a Building Automation System (via BACnet MS/TP or IP), or by a LUA script running on the room controller.

Q8: **After setting temperature setpoints over BACnet, why can they not be changed at the thermostat?**

A1: The point has been added to the BAS as "Present Value". Change it to "Relinquish Default".

Q9: **Why are parameters configured via BACnet lost after a power-cycle?**

A1: BACnet points written between priorities 4 to 16 are lost after a power-cycle. Use priority 1, 2 or 3 or "Relinquish Default".

Q10: **Why do heating outputs W1 and W2 indicate ON but there is no voltage output?**

A1: W1 and W2 outputs are isolated. They do not switch "RC" 24 Vac. They are switching "RH" terminal. Install a jumper across "RC" and "RH".

Q11: **What type of temperature sensors are compatible?**

A1: NTC 10,000 Ohm type 2.

Q12: **Can a remote sensor average with an internal sensor?**

A1: The remote room sensor (UI20) can take over the internal sensor but not average with it.

A2: A custom LUA program can be loaded in the 8000 to average, or to get the highest and lowest temperatures from one or multiple remote sensors.

Q13: Can an 8650 Outside Air Temperature (OAT) sensor input (UI23) be used for another sensor like Mixed Air?

A1: No, the input will automatically display "Outdoor: XX°X" on the display and the related OAT lockouts may block thermostat operations.

A2: Use another free input such as UI19, UI20, UI22 or UI24.

Q14: Can the outdoor temperature be sent over BACnet instead of using a wired 8650 OAT sensor? If yes, will the lockouts still work?

A1: Yes, the outside air temperature can be sent to all 8000 room controllers over BACnet. All OAT-related features and lockouts will work.

Q15: Can a remote humidity sensor be used?

A1: Not natively, a custom LUA program can be loaded in the 8000 to use a 0-10 Vdc humidity sensor and take over the 8000 internal sensor.

Q16: Do analog inputs accept a 4-20 mA signal?

A1: The 8000 does not accept a 4-20 mA signal, however, a 500 Ohm resistor across the input transforms 4-20 mA to 2-10 Vdc.

Q17: Can 0-10 Vdc input and outputs be set to 2-10 Vdc?

A1: Most inputs and outputs are operating on the full range of 0 to 10 Vdc. There is no parameter to re-scale to 2-10 Vdc, except for the damper actuator and duct fan on the VAV 8250.

A2: A custom LUA program can be loaded in the 8000 to re-scale the inputs and outputs to 2-10 Vdc or anything else.

Q18: Why does the 8650 dehumidification status indicate ON but the Y1 and Y2 compressors are Off?

A1: The 8650 dehumidification does NOT activate Cooling nor Heating outputs. It only activates Fan and UO12 (for units with a built-in dehumidification sequence).

A2: A custom LUA program can be loaded in the 8650 to activate Y1, Y2, and W1 with sub-cool and over-heat protections.

Q19: Can configuration parameters and the occupancy schedule be saved from one 8000 then loaded in others?

A1: Use the Uploader8000 Software to download configuration points, schedule, date and time, etc. from one 8000 then upload into all others.

Q20: Can the 8000 communicate with 3rd-party ZigBee devices?

A1: No, it is not possible.

Q21: What can I do when the 8000 is password protected and I do not have it?

A1: Call your Technical Support agent, who will guide you through the password recovery process..

Q22: Is there or will there be an SEZ8650 for the corresponding RTU/AHU?

A1: There is currently no plan to create a VVT system with an 8650 controlling the RTU/AHU for zones controlled by the 8250.

Q23: Can we rename the objects?

A1: The 8000 series does not support renaming of objects.

Q24: Is there a suggested list of actuators and flow control?

A1: Recommended damper: Schneider Electric MS41-6043 or equivalent

A2: Recommended air flow sensor: Schneider Electric (Veris) PX3PXX01 or equivalent

Q25: Can you explain how CFM is measured in this application?

A1: Refer to the documentation for details. Flow measurement requires a Differential Pressure Sensor with a 0-10V analog output.

Q26: On the Bacnet IP product announcement, it mentioned a future wired Bacnet IP solution. Is that still planned?

A1: Wired ethernet is on our priority list, but support from the 8000 family is not currently scheduled due to complexities of mechanical design and installation.

Q27: Can you install the CO_2 plugin module?

A1: Yes, you can use the VCM8001 CO_2 module with the 8250. As there is only one expansion connector you can only install one VCM (ZigBee, CO_2 or Wi-Fi).

Note: SKUs are available with internal ZigBee, leaving the expansion connector available for CO_2 or Wi-Fi.

Q28: Is the duct heating only controlled via Room Temperature via its Demand, or can it be configured to do Discharge Air Control thru Configuration - or would that require LUA Script ATM?

A1: Duct heating can be controlled via Room Temperature, and hence Heating Demand, on all room controllers. Only the SE8650 can be configured to do Discharge Air Control, the other room controllers do not have this capability. To activate Discharge Air Control on the SE8650, the Heat Stages parameter is set to 0 (Analog heat on UO11) and the supply air temperature sensor is connected to UI22.

Q29: Where can I find the GNU Lesser General Public License?

A1: For three years after the final factory shipment, you may request a copy of the source code for any portions of the product, which are licensed under the GNU Lesser General Public License by writing to the following address:

7262 Marconi Street
Third Floor
Montreal, QC, H2R 2Z5
Canada

Note: Viconics Technologies shall bear no responsibility whatsoever for the source code or its use.

The source code will be provided at no charge, however, we may require you to reimburse Viconics Technologies for the cost of delivering the source code to you.

Q30: Touchscreen issues – why is my room controller's screen not working?

A1: A new Printed Circuit Board Assembly (PCBA) is used in the latest version of the Room Controller hardware. Firmware 2.6 and newer works with both the old and new hardware. But firmware 2.5 and older does not work with the new hardware, making the touchscreen inoperative. Do not downgrade the firmware on the new hardware. If you have issues with your Room Controller touchscreen, upgrade your device to Firmware 2.6 or newer.