VT7225 Series

User Interface Guide

For Modulating Heat Applications

November 2017

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CONFIGURING AND STATUS DISPLAY INSTRUCTIONS

Status display

The Room Controller features a two-line, eight-character display. There is a low-level backlight level that is always active and can only be seen at night.

To turn on the back light to high level, press any key on the front panel. The back lit display will return to low level when the Room Controller is left unattended for 45 seconds.
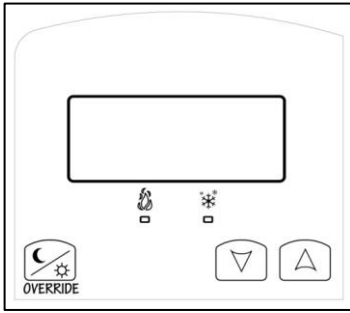
Occupancy Status

- Occupied, Unoccupied and Override status are displayed on the display.

LED Status

Status LED's on the Room Control cover are used to indicate a call for heat.

When **heating & reheat** is **ON**, the **HEAT LED will illuminate**	
Not used	

USER INTERFACE

Unoccupied mode override
An Override can be made during an unoccupied period.

Local keypad interface

OVERRIDE	1.	An Override can be made during an unoccupied period. If the Override option is enabled in the lockout configuration pressing the override key will resume occupied setpoints for a time specified by parameter ToccTime
▽	2.	Decrease setpoint
△	3.	Increase setpoint

4. Any setpoint change can be permanent or temporary based on configuration parameter (Setpoint Type)
5. Lockouts of access to certain functions is made with configuration parameter (lockout)

Unoccupied setpoints adjustments

Setting of the unoccupied setpoints is done through configuration setup only.

Installer Configuration Parameter Menu

Configuration can be done locally on the Room Controller. To enter configuration, press and hold the left button (Override) for 8 seconds.

If a password lockout is active, "*Password*" is prompted. Enter password value using the "*up*" and "*down*" arrows and press the middle button again to gain access to all configuration properties of the Room Controller. Entering a wrong password will prevent local access to the configuration menu.

1. Press the same middle button repetitively to scroll between all the available parameters.
2. Use the up and down key to change the parameter to the desired value.
3. To acknowledge and save the new value, press the override button again.
4. The next parameter will now be displayed.

Configuration interface

OVERRIDE	Pressing repetitively will individually scroll all the available parameters
▽	Adjust value down
△	Adjust value up

Remote NSB Operation: remote NSB timer clock input. The scheduling will now be set as per the binary input (BI1). It provides low cost setback operation via a dry contact.

- Contact opened = Occupied
- Contact closed = Unoccupied

Supply air sensor: Used for supply air temperature control. Connecting a 10K Type II probe to pin UI3 enables this feature. The proportional band and integral time are automatically adjusted for supply air control. The display will show "SuppTemp".

CONFIGURATION PARAMETERS DEFAULT VALUE	SIGNIFICANCE AND ADJUSTMENTS
PswrdSet Default value = **0**	This parameter sets a password access to prevent unauthorized access to the configuration menu parameters. A default value of "0" will not prompt a password or lock the access to the configuration menu. Range: 0 to 1000
MenuScro Default value = **Off**	Removes the scrolling display and displays the room temperature to the user. On = Scroll active Off = Scroll not active
°C or °F Default value = **°F**	Sets scale of the Room Controller °F for Fahrenheit scale °C for Celsius scale

Lockout

Default value = **0 No lock**

Keypad lockout levels

USER KEY FUNCTIONS

LEVEL	OVERRIDE	▽ △
0	🔓	🔓
1	🔒	🔓
2	NOT USED	
3		
4	🔓	🔒
5	🔒	🔒

CONFIGURATION PARAMETERS DEFAULT VALUE	SIGNIFICANCE AND ADJUSTMENTS
Unocc HT Default value = **62°F (17°C)**	Unoccupied heating setpoint Range is: 0 to 180 °F (-17 to 82 °C)
Heat max Default value = **90°F (32°C)**	Maximum occupied & unoccupied heating setpoint adjustment. Range: **0 to 180°F (-17.0 to 82°C)**
Heat min Default value = **54°F (12 °C)**	Minimum occupied & unoccupied cooling setpoint adjustment. Heating setpoint range is: **0 to 180°F (-17.0 to 82°C)** **Note:** Heat max has priority over Heat min value.
Pband Default: **3**	Adjust the proportional band used by the Room Controller PI control loop. **Note** that the default value of 3.0°F (1.2 °C) gives satisfactory operation in most normal installation cases. The use of a proportional band different than the factory one is normally warranted in applications where the Room Controller location is problematic and leads to unwanted cycling of the unit. A typical example is a wall mounted unit where the Room Controller is installed between the return and supply air feeds and is directly influenced by the supply air stream of the unit. (see table below) **Note**: When a supply sensor is connected to UI3, this parameter is not used. The internal proportional band is fixed at 50 °F (27 °C).
Set Type Default: **Permnent**	**Temporar:** (temporary) Local changes to the heating or cooling setpoints by the user are temporary. They will remain effective for the duration specified by "ToccTime". Setpoints will then revert back to their default value after internal timer "ToccTime" expires. **Permnent:** (permanent) Any change of occupied or unoccupied setpoints through the keypad by the user are permanent and saved to & EEPROM

VALUE	°F SCALE PBAND	°C SCALE PBAND
3	3 F	1.2 C
4	4 F	1.7 C
5	5 F	2.2 C
6	6 F	2.8 C
7	7 F	3.3 C
8	8 F	3.9 C
9	9 F	5.0 C
10	10 F	5.6 C

ToccTime Default value = **2 hours**	Temporary occupancy time with occupied mode setpoints when override function is enabled. Range: **0-24 hours**
Cal RS Default value= **0.0 °F or °C**	Offset that can be added/subtracted to the actual displayed room temperature Range: **± 5.0 °F, 1.0 °F increments (± 2.5 °C, 0.5 °C increments)**