VT8300 User Interface Guide
VT8300 Room Controller Series
Commercial and Hotel/Lodging HVAC Fan Coil Applications

## CONTENTS

VICONICS
Beyond Comfort

HMI Display

The below shows a typical user interface for the hospitality industry. The User HMI is configurable and allows display functions such as Date, Time, Humidity, Outdoor Temperature, and Setpoint to be enabled or disabled by setting various parameters.

Date — 26.09.2012 — 2:43 PM — Time

Occupancy Status — Occupied — System Status

Fan Status

Indoor °C — Up Arrow Increase Temperature Setpoint

Indoor Temperature — 23.5° — Actual Setpoint — 24.0

Down Arrow Decrease Temperature Setpoint

Indoor Humidity — Humidity 45 % — Outdoor 18 °C

Outdoor Temperature

System Mode — Help

Short Network Message — Room 1705

Fan Mode

Language Selection

Temperature Units

General Notes

1. When any change is made to a parameter, the value is automatically saved in memory when the next parameter is selected or another page is opened.
2. Arrows auto-increment/decrement at higher speed when holding button for more than 0.5 second.
3. All objects related to humidity do not display on HMI when Controller is ordered without built-in humidity sensor.

Enter Set-up Screen
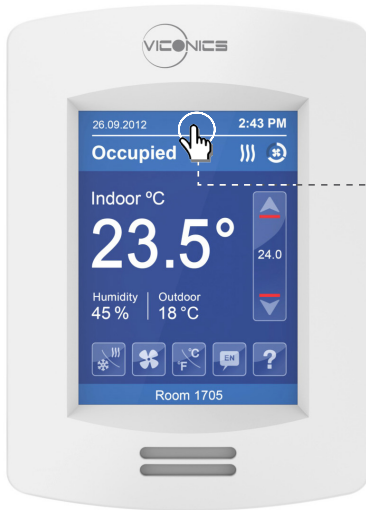
Touch and hold this point for 3 seconds to enter setup mode

Note: If a configuration/installer password is activated to prevent unauthorised access to the configuration menu parameters, a password entry prompt shows to prevent access to device configuration components.

Setup
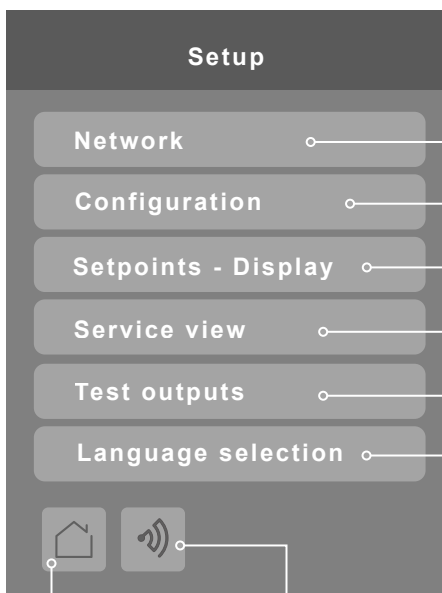
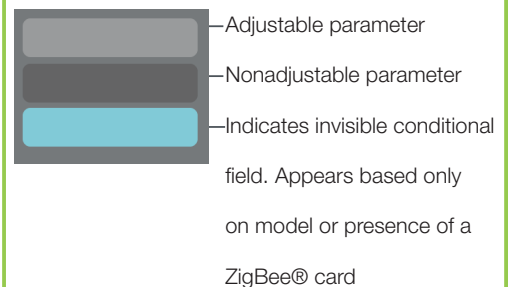| Network | Enter BACnet® & ZigBee® network settings (only if ZigBee is detected) |
Configuration	Enter parameter configuration menu
Setpoints - Display	Enter setpoint and display settings
Service view	Enter status and service view
Test outputs	Enter output testing mode
Language selection	Enable selected language(s)*

Return to home screen

Discover Mode The Controller becomes discoverable on the wireless ZigBee® network for 1 minute (this button is hidden if ZigBee® settings are not configured)

Note: The following menus show according to context:
- ZigBee menu shows if ZigBee card detected.
- BACnet menu shows if model supports BACnet
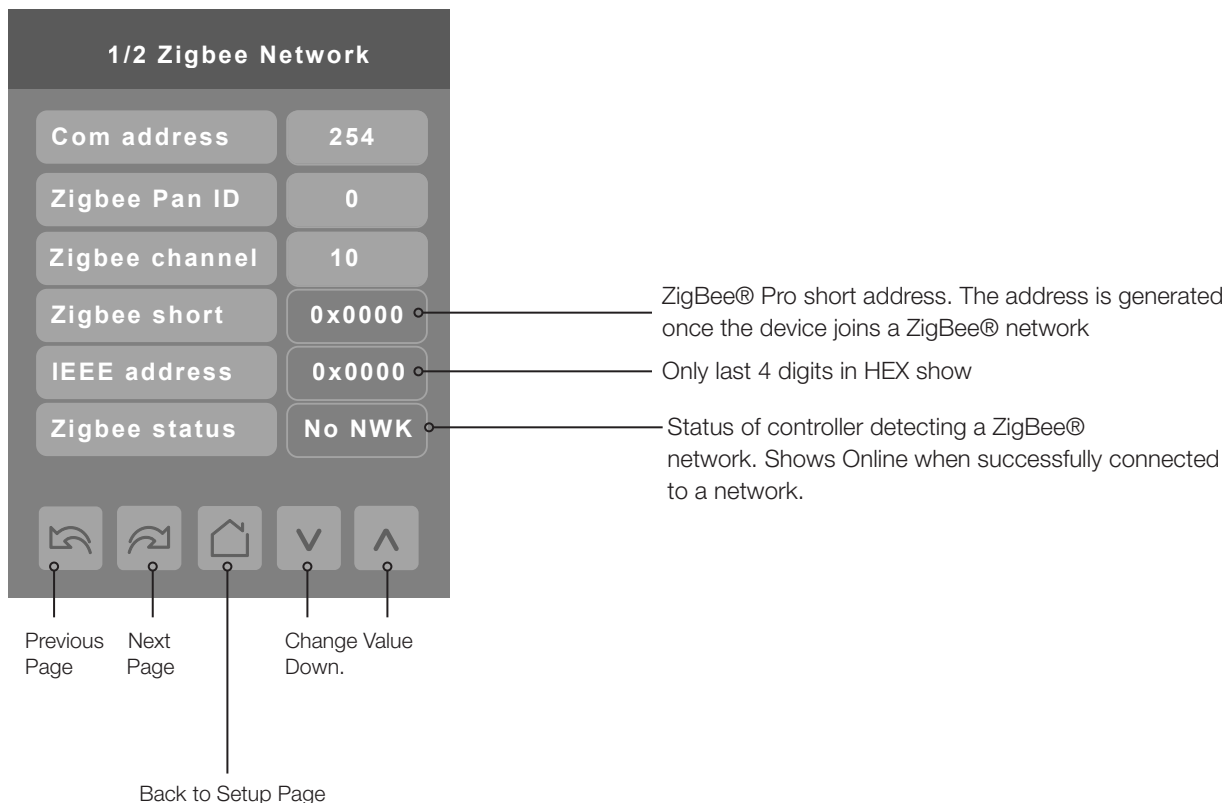- Network choice inside does not show if no network is available

General Note:

—Adjustable parameter

—Nonadjustable parameter

—Indicates invisible conditional field. Appears based only on model or presence of a ZigBee® card

*only available in recent versions of firmware

ZIGBEE PRO NETWORK SETTINGS

ZigBee Pro set-up screen shows when a ZigBee card is detected in the model. Select the desired parameter and use the up or down arrow to set the parameter to the desired value.

1/2 Zigbee Network
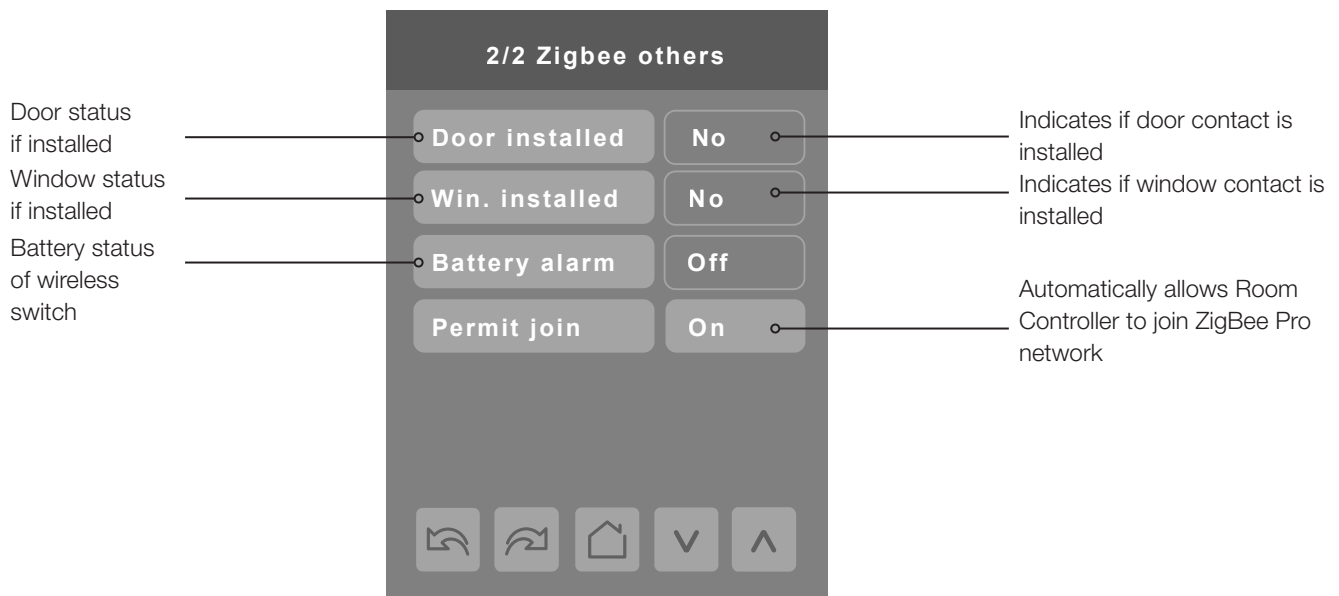
Com address	254
Zigbee Pan ID	0
Zigbee channel	10
Zigbee short	0x0000
IEEE address	0x0000
Zigbee status	No NWK

ZigBee® Pro short address. The address is generated once the device joins a ZigBee® network

Only last 4 digits in HEX show

Status of controller detecting a ZigBee® network. Shows Online when successfully connected to a network.

Previous Page   Next Page   Change Value Down.

Back to Setup Page

PARAMETER DETAILS

Configuration Parameters Default Value	Significance and Adjustments
Com address Terminal Equipment Controller networking address Default value = 254 Range value = 0 - 254	**Communication Address** For wireless models, the use of COM address is not mandatory. The extended IEEE ZigBee® node address is used to identify the device on the network. The COM address is an optional way to identify a device on the network.

PARAMETER DETAILS

Configuration Parameters Default Value	Significance and Adjustments
ZigBee Pan ID Personal Area Network Identification Default value = 0 Range value = 0 - 1000	**ZigBee Pro PAN ID** Links specific Terminal Equipment Controllers to specific ZigBee® Pro coordinators. For every Terminal Equipment Controller reporting to a coordinator. Ensure set the SAME channel value both on the coordinator and the Terminal Equipment Controller(s). Default value of 0 is NOT a valid PAN ID. The valid range of available PAN ID is from 1 to 1000. Range 1 to 500 for centralized networked applications using a ZigBee® Pro Coordinator. Range 501 to 1000 is for stand-alone applications where each controller is its own coordinator for stand alone installation of wireless door and window switches.
ZigBee channel Channel selection Default value = 10 Range value = 10 - 25	**ZigBee channel** This parameter links specific Terminal Equipment Controllers to specific ZigBee® Pro coordinators. For every Terminal Equipment Controller reporting to a coordinator, ensure you set the SAME channel value both on the coordinator and the Terminal Equipment Controller(s). **Using channels 15 and 25 is recommended.** The default value of 10 is NOT a valid channel. The valid range of available channel is from 11 to 25.
ZigBee status Read only	**ZigBee status** The following read only messages show in this field: • (Not Det): ZigBee® Pro module not detected • (Pwr On): ZigBee® Pro module detected but not configured • (No NWK): ZigBee® Pro configured but no network joined • (Joined): ZigBee® Pro network joined • (Online): Communicating

Note: The following menus shows according to context:

1. If ZigBee Pro card is detected, ZigBee configuration menus automatically show.

2. Bacnet menus show if the model supports BACnet.

3. Network choice inside the Setup screen does not show if no network is available.
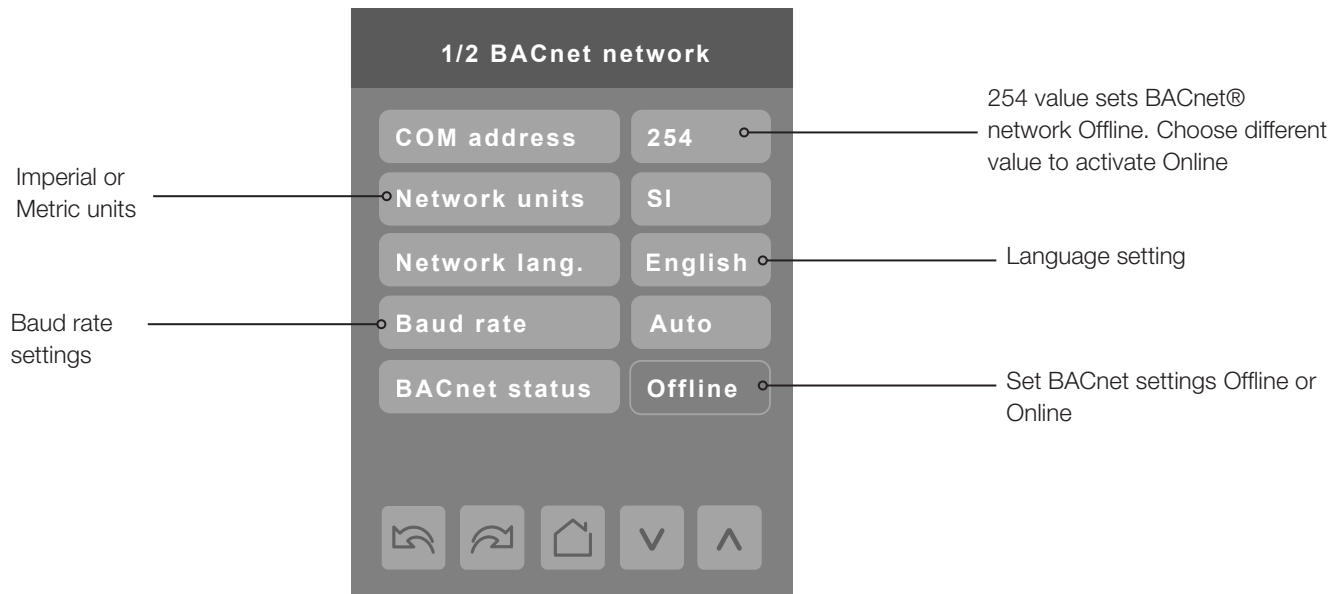
2/2 Zigbee others

Door status
if installed ——————— Door installed   No ——— Indicates if door contact is
                                                 installed
Window status
if installed ——————— Win. installed   No ——— Indicates if window contact is
                                                 installed
Battery status
of wireless ——————— Battery alarm   Off
switch
                    Permit join   On ——— Automatically allows Room
                                                 Controller to join ZigBee Pro
                                                 network

Note: Display returns to home screen when no activity
is detected for 1 minute.

PARAMETER DETAILS

Configuration Parameters Default Value	Significance and Adjustments
Permit join Default value = On	**Permit Join** Changing this value to Off prevents any new ZigBee® Pro devices from joining network through this controller.

BACNET NETWORK SETTINGS

BACnet network set-up screen shows when BACnet is detected in model. Select desired parameter and use up or down arrow to set parameter to desired value.

Imperial or Metric units
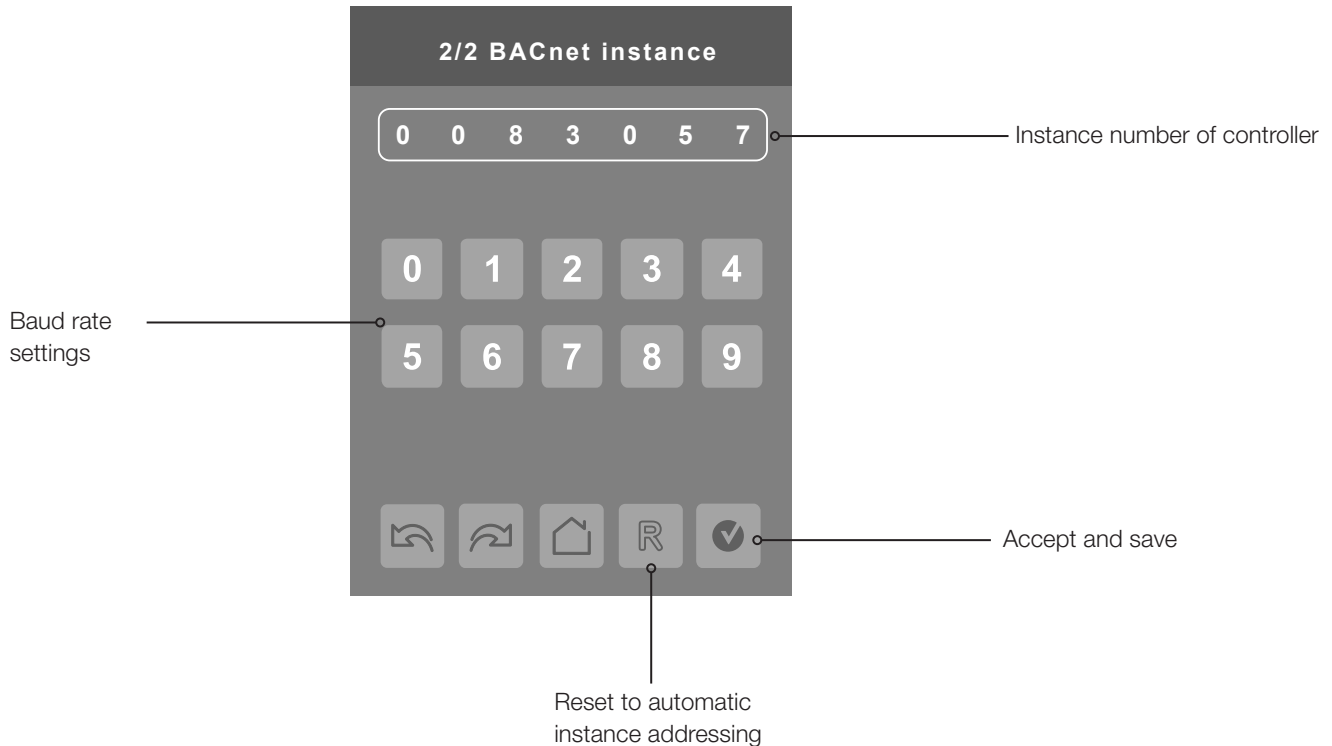
Baud rate settings

1/2 BACnet network

COM address	254
Network units	SI
Network lang.	English
Baud rate	Auto
BACnet status	Offline

254 value sets BACnet® network Offline. Choose different value to activate Online

Language setting

Set BACnet settings Offline or Online

PARAMETER DETAILS

Configuration Parameters Default Value	Significance and Adjustments
Comm address Terminal Equipment Controller networking address Default value = 254 Range: 0 to 254	**Communication Address** For BACnet® MS-TP models, the valid range is from 1 to 127. Default value of 254 disables BACnet® communication for the Terminal Equipment Controller.
Network units Default value = Imperial	**Measurement Units** (Imperial): network units shown as Imperial units. (SI): network units shown as International Metric units.
Network lang Default value = English	**Language Settings** Choice of network language/object names transmitted over network. All available choices: (English, French, and Spanish).
Baud rate Default value = Auto	**Baud Rate** (Auto): automatically detects BACnet® MS/TP baud rate. Other choices: (115200, 76800, 57600, 38400, 19200, and 9600).

BACNET INSTANCE NUMBER

The default BACnet® instance number is generated by the model number and COM address of the controller. For example, The instance number of a SE8300A5B00 with a COM address of 57 is generated as "83057".

The default instance number appears first. To change the instance number, use number pad and press **Accept and save.**

Press Reset to automatic instance addressing to reset to automatic instance addressing.

```
          2/2 BACnet instance

   0   0   8   3   0   5   7     ———— Instance number of controller


       0   1   2   3   4
Baud rate
settings ——
       5   6   7   8   9


       ↰   ↱   ⌂   R   ✔  ———— Accept and save


              Reset to automatic
              instance addressing
```

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CONFIGURATION PARAMETERS SCREEN 1//7

1/7 Configuration

UI 16	None
UI 17	None
UI 19	None
Occupancy cmd	Loc occ.

PARAMETER DETAILS

Configuration Parameters Default Value	Significance and Adjustments
UI 16 Universal input no.1 configuration Default value = None	**Universal Input No. 1** **None:** no function associated with input **Rem NSB:** remote NSB timer clock input. The scheduling gets set as per the binary input and provides low cost setback operation via a dry contact. **Motion No and Motion NC:** advanced PIR occupancy functions using a Normally Open (NO) or Normally Closed (NC) remote PIR motion sensor. **Window EMS:** forces system to disable any current heating or cooling action by Terminal Equipment Controller.
UI 17 Universal input no.2 configuration Default value = None	**Universal Input No. 2** **None:** no function associated with input. **Door Dry:** door contact and motion detector. **Override: t**emporary occupancy remote override contact. **Filter:** backlit flashing filter alarm shows on the Terminal Equipment Controller LCD screen when the input is energized. **Service:** backlit flashing Service alarm shows on Terminal Equipment Controller LCD screen when input is energized.

PARAMETER DETAILS SCREEN 1/7

Configuration Parameters Default Value	Significance and Adjustments
UI 19 Universal input no.3 configuration Default value = None	**Universal Input No. 3** **None:** no function associated with input though input can be used for remote network monitoring. **COC/NH:** change over dry contact. Normally heat used for hot/cold water or air change over switching in 2 pipe systems. **COC/NC:** change over dry contact. Normally cool used for hot/cold water or air change over switching in 2 pipe systems. **COS:** change over sensor. Used for hot/cold water or air change over switching in 2 pipe systems.
Occupancy cmd Default value = Local	**Occupancy Command** **Loc Occ:** occupancy is determined by local sequences. **Occupied:** force occupied mode. **Unoccup:** force unoccupied mode.

CONFIGURATION PARAMETERS SCREEN 2/7

2/7 Configuration

Auto mode	Enabled
Fan menu	On-Auto
Auto fan func.	AS
Standy mode	Abs
Standby diff.	2.0 C

PARAMETER DETAILS SCREEN 2/7

Configuration Parameters Default Value	Significance and Adjustments
Auto mode Enables Auto menu for Mode button Default value = On	**Auto Mode** Enables auto function for the mode button For sequences 2, 4, and 5 only On = auto active (Off-Cool-Heat-Auto) Off = auto not active (Off-Cool-Heat)
Fan menu Default value = Local	**Fan Speeds** User fan menu presented is dependent on selected fan sequence of operation for the fan coil. **L-M-H:** 3 Speed configuration using 3 fan relays. **L-H:** 2 Speed configuration using 2 fan relays. **L-M-H-A:** 3 Speed configuration with Auto fan speed mode using 3 fan relays. Auto Mode operation is dependent on Auto Fan parameter. **L-H-A:** 2 Speed configuration with Auto fan speed mode using 2 fan relays. Auto Mode operation is dependent on Auto Fan parameter. **On-Auto:** single Speed configuration. Auto is for Fan on demand/On is On all the time.
Auto fan func. Auto Fan Function Default value: AS	**Automatic Fan Function** Auto Speed Fan Mode operation for Fan Menu (L-M-H-A) or (L-H-A). **AS:** auto Speed during occupied periods. Fan is always on during occupied periods. **AS/AD:** auto Speed/Auto Demand during occupied periods.

PARAMETER DETAILS SCREEN 2/7

Configuration Parameters Default Value	Significance and Adjustments
Standby mode Default value: Abs	**Standby Mode** Choose which standby setpoints are used for control. **Abs:** absolute Standby entered values are used for standby mode. **Offset:** offset Occupied setpoints +/- Standby diff. used for standby mode.
Standby diff. Default value: 2 °C (3 °F)	**Standby Difference** When Standby mode is Relative, standby setpoints are calculated as: Standby cool = Cool setpoint + Standby diff. Standby heat"= Heat setpoint - Standby diff. Adjustable from 0.5 a 2.5 °C (1 - 5 °F)

CONFIGURATION PARAMETERS SCREEN 3/7

3/7 Configuration

Standby time	0.5 hrs
Unocc. time	0.0 hrs
Temp. occ. time	2.0 hrs
Deh hysteresis	5.0% RH	✱
Deh. max cool	100%	✱
Deh. lockout	Enabled	✱
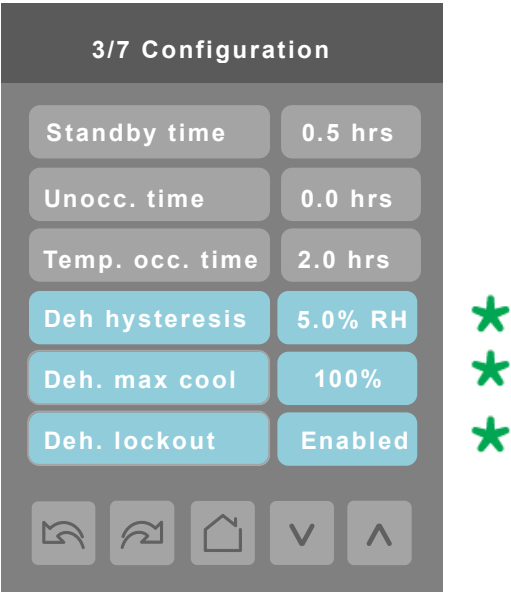
✱ These parameters are only displayed on models with built in humidity sensor

PARAMETER DETAILS SCREEN 3/7

Configuration Parameters Default Value	Significance and Adjustments
Standby time Default value: 0.5 hours	**Standby Time** Time delay between the moment where the PIR cover detects last movement in the area, and the time which the Terminal Equipment Controller stand-by setpoints become active. Range: 0.5 to 24.0 hours in 0.5 hours increments.
Unocc. time Default value: 0.0 hours	**Unoccupied Time** Time delay between the moment where the Terminal Equipment Controller toggles to stand-by mode, and the time which the Terminal Equipment Controller unoccupied mode and setpoints become active. Factory value 0.0 hours: Setting this parameter to its default value of 0.0 hours disables the unoccupied timer. This prevents the Terminal Equipment Controller to drift from stand-by mode to unoccupied mode when PIR functions are used. Range: 0.0 to 24.0 hours in 0.5 hours increments.

PARAMETER DETAILS SCREEN 3/7

Configuration Parameters Default Value	Significance and Adjustments
Temp. occ. time Default value: 2 hours	**Temporary Occupancy Time** Temporary occupancy time with occupied mode setpoints when override function is enabled. When Terminal Equipment Controller is in unoccupied mode, function is enabled with either the menu or UI2 configured as remote override input. Range: 0 - 24 hours.
Deh. hysteresis Default value: 5% RH	**Humidity Control Hysteresis** Used only if dehumidification sequence is enabled: Range: 2 to 20% RH (models with humidity sensor only).
Deh. max. cool Default value: 100%	**Maximum Dehumidification Cooling** Maximum cooling valve position when dehumidification is enabled. This can be used to balance smaller reheat loads installed in regards to the capacity of the cooling coil. Range: 20 to 100 % (models with humidity sensor only).
Deh. lockout Default value: Enabled	**Dehumidification Lockout** Typically toggled through the network. This variable enables or disables dehumidification based on central network requirements from the BAS front end. Enabled = Dehumidification Authorized Disabled = Dehumidification Not Authorized **Models with humidity sensor only.**

CONFIGURATION PARAMETERS SCREEN 4/7

4/7 Configuration	
CPH	4
Control Type	Floating
BO8 Out Time	15 min
BO8 AuxOut	Not used
Floating Time	0.5 min
DA/RA	DA

PARAMETER DETAILS SCREEN 4/7

Configuration Parameters Default Value	Significance and Adjustments
CPH Default value: 4 CPH	**Cooling Output Cycles/Hr** Sets maximum number cycles per hour under normal control operation. It represents the maximum number of cycles equipment turns ON and OFF in one hour. A higher CPH represents a higher accuracy of control at the expense of wearing mechanical components faster. Range: 3, 4, 5, 6,7 and 8 CPH.
Control Type Control type for Triac models Default: Floating	**Control Output for FCU Valves** Defines type of control output for type of valves installed for the FCU application **On/Off:** normally opened or normally closed 24 VAC 2 position valves **Floating:** modulating 3 wires control of 24 VAC floating valves **Analog:** analog modulating control of 2-10 Vdc valves Refer to proper control diagram according to selected control type outputs.

PARAMETER DETAILS SCREEN 4/7

Configuration Parameters Default Value	Significance and Adjustments
BO8 Out Time Default value: 0 = 15 minutes	**Reheat Output Time** Sets reheat output time base. Valid only if reheat sequences are enabled. **0** = 15 minutes **1** = 10 seconds for solid state relays
BO8 AuxOut Aux contact function used for reheat if sequence is set to use BO8 for reheat through network or local. Ignore this parameter. Default value = Not Used	**Binary Output Terminal** Output directly follows occupancy of the Terminal Equipment Controller. **1) Auxiliary NO:** Occ or St-By = Contact Closed / Unoccupied = Contact Opened **2) Auxiliary NC:** Occ or St-By = Contact Opened / Unoccupied = Contact Closed. Output to follow directly main occupancy and Fan on command. Typically used for 2 position fresh air damper applications. **3) Auxiliary NO:** Occ or St-By & Fan On = Contact Closed/ Unoccupied and Fan On or Off = Contact Opened **4) Auxiliary NC:** Occ or St-By & Fan On = Contact Opened/ Unoccupied and Fan On or Off = Contact Closed
Floating Time Floating actuator stroke timing value Default value: 1.5 minutes floating actuator timing	**Floating Time** Maximum stroke time of floating valve actuator. Range: 0.5 to 9.0 minutes in 0.5 minute increments
DA/RA For Analog signals Default value: DA signal	**Direct Acting/Reserve Acting** Reverse Acting or Direct Acting signal for Analog Output signals **DA =** 0 to 100 % = 0 to 10VDC **RA =** 0 to 100 % = 10 to 0VDC

CONFIGURATION PARAMETERS SCREEN 5/7

5/7 Configuration

Prop. band	3.0
Pipe no.	2
Seq. operation	Heat only
Purge sample	0.0 hrs
Purge open	1 min

PARAMETER DETAILS SCREEN 5/7

Configuration Parameters Default Value	Significance and Adjustments
Prop. band Default value: 3	**Proportional Band Setting** Adjusts proportional band used by the Terminal Equipment Controller PI control loop. **Note:** default value of 3.0 gives satisfactory operation in most normal installation cases. The use of a superior proportional band different than the factory one is normally warranted in applications where Terminal Equipment Controller location is problematic and leads to unwanted cycling of the unit. A typical example is a wall mounted unit where Terminal Equipment Controller is installed between return and supply air feeds and is directly influenced by the supply air stream of unit.

Value	Effective Proportional Band	
	Fahrenheit	Celsius
3	3	1.2
4	4	1.7
5	5	2.2
6	6	2.8
7	7	3.3
8	8	3.9
9	9	5.0
10	10	5.6

PARAMETER DETAILS SCREEN 5/7

Configuration Parameters Default Value	Significance and Adjustments
Pipe no. Default value: 4 pipes	**Pipe Setting Type Installed** Defines type of system installed. **2 Pipes:** limits number of sequences of operation available from 0 - 4. It also enables heat/cool operation from the same output. **4 Pipes:** can access all sequences of operation from 0 - 2. Also enables heat/cool operation from different output.
Seq. operation Default value: Sequence #1	**Sequence Operation** Selects initial sequence of operation required by installation type and application.

System Mo9des	System = 2 Pipes	System = 4 Pipes
Off - Cool	0 = Cooling Only	0 = Cooling Only
Off - Heat	1 = Heating Only	1 = Heating Only
Off - Auto - Heat - Cool	2 = Cooling With Electric Reheat	2 = Cooling With Electric Reheat
Off - Heat	3 = Heating With Electric Reheat	3 = Heating With Electric Reheat
Off - Auto - Heat - Cool	N/A	4 = Cooling and Heating (2 modulating outputs)
Off - Auto - Heat - Cool	N/A	5 = Cooling/Heating (2 modulating outputs) with reheat
	For 2 Pipe output applications, the system is limited if configured for local changeover COS, COC/NC or COC/NC. The current water temperature detected by the RU1 then limits the system mode available for the local configuration or network write. For Sequence 2 and 3, set PulsedHt to On to enable pulsed electric reheat applications with SE8300B and SE8300E	

Configuration Parameters Default Value	Significance and Adjustments
Purge Sample Default value: 2 hours	**Purge Sample** Time interval between valve samples. Opens valve for a short period adjusted by Purge open parameter to sample pipe temperature to decide between heating or cooling mode. Adjustable for 0 to 4 hours (0 = disable).
Purge Open Default value: 2 minutes	**Purge Open** Time valve opens to sample pipe temperature to decide between heating or cooling mode. Adjustable for 1 to 3 minutes.

CONFIGURATION PARAMETERS SCREEN 6/7

6/7 Configuration

Main password	0
User password	0
Calib. temp.	0.0 C
Calib. humid.	0% RH	★

★ Parameter only displayed on models with built in humidity sensor.

PARAMETER DETAILS SCREEN 6/7

Configuration Parameters Default Value	Significance and Adjustments
Main password Default value: 0	**Main Password** Installer password. This parameter sets a protective access password to prevent unauthorized access to configuration menu parameters. Default value of 0 does not prompt a password or lock access configuration menu. Range: 0 - 9999.
User Password Default value: 0	**User Password** User password. This parameter sets a protective access password to prevent user unauthorized access to main screen adjustments. Default value of 0 does not prompt a password. Range: 0 - 9999.
Calib. temp. Default value = 0.0 °C or °F	**Calibration Temperature** Room temperature sensor calibration. Offset can be added or subtracted to actual displayed room temperature. Range: ± 2.5 °C, 0.5 °C increments (± 5.0 °F, 1.0 °F increments).
Calib. humid. Default value = 0% RH	**Humidity Calibration** Humidity sensor calibration. Offset can be added or subtracted to actual displayed humidity. Range: ± 15.0 %RH (models with humidity sensor only).

CONFIGURATION PARAMETERS SCREEN 7/7

7/7 Reinitialization

Erase all?   No

Are you sure?   No

Push to accept: ✓
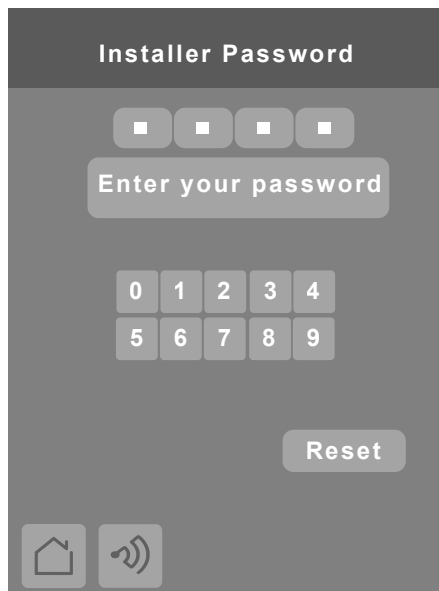
PARAMETER DETAILS SCREEN 7/7

Configuration Parameters Default Value	Significance and Adjustments
Erase all? Default value: No	**Erase All** Answering Yes on both and pressing Accept button erases all values and changes to factory default values except the following network related values: • COM address • ZigBee® Pro Pan ID • ZigBee® Pro channel • Network units • Network language • Baud rate • BACnet® instance • Device name
Are you sure? Default value: No	

PASSWORD SETTINGS

The following shows you how to enter the password for the Installer and User

Installer Password

1. Installer password prompt shows only if password value is greater than 0000. A password value of 0000 disables installer password but does not restrict access to configuration options.
2. Installer password prompt automatically disappears after 10 seconds if no value is entered.
3. An error code is automatically generated if incorrect password is entered.
4. Installer is permitted access to all Installer functions and menus when correct password is entered.

User Password
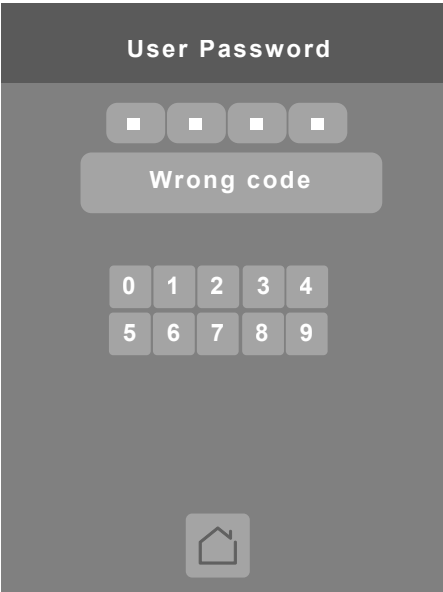
1. User password prompt shows only if password value is greater than 0000. A password value of 0000 disables user password but does not restrict access to local user functions.
2. User password prompt automatically disappears after 10 seconds if no value is entered.
3. User is permitted access to controller interface to change any allowed settings when correct password is entered.
4. Password lock resumes after 1 minute of non activity.

PASSWORD PARAMETER DETAILS

Configuration Parameters Default Value	Significance and Adjustments
Main password Default value: 0	**Installers Password** Parameter sets a protective access password to prevent unauthorized access to the configuration menu parameters. A default value of 0 does not prompt a password or lock access to configuration menu. Range: 0 to 9999.
User password Default value: 0	**Are You Sure** Parameter sets a protective access password to prevent User unauthorized access to main screen adjustments. A default value of 0 does not prompt for a password. Range: 0 to 9999.

SETPOINT SETTINGS 1/2

1/2 Setpoints

Unocc. cool.	26.5 C
Standby cool.	25.5 C
Occ. cool.	24.0 C
Occ. heat.	22.0 C
Standby heat.	20.5 C
Unocc. heat.	16.5 C

SETPOINT PARAMETER DETAILS

Configuration Parameters Default Value	Significance and Adjustments
Unocc. cool. Default value: 26.5 °C (80 °F)	**Unoccupied Cooling** Unoccupied cooling setpoint range: 12.0 to 37.5 °C (54 to 100 °F).
Standby cool. Default value: 25.5 °C (78 °F)	**Standby Cooling** The value of this parameter should be set between occupied and unoccupied cooling setpoints. Ensure difference between standby and occupied value can be recovered in a timely fashion when movement is detected in the zone. Stand-by cooling setpoint range: 12.0 to 37.5 °C (54 to 100 °F).
Occ. cool. Default value: 24.0 °C (74 °F)	**Occupied Cooling** Cooling setpoint range: 12.0 to 37.5 °C (54 to 100 °F).
Occ. heat. Default value: 22.0 °C (72 °F)	**Occupied Heating** Heating setpoint range: 12.0 to 37.5 °C (54 to 100 °F).
Standby heat. Default value: 20.5 °C (69 °F)	**Standby Heating** The value of this parameter should be set between occupied and un-occupied heating setpoints. Ensure difference between standby and occupied value can be recovered in a timely fashion when movement is detected in the zone. Stand-by heating setpoint range: 4.5 to 32.0 °C (40 to 90 °F).
Unocc. heat. Default value: 16.5 °C (62 °F)	**Unoccupied Heating** Unoccupied heating setpoint range: 4.5 to 32.0 °C (40 to 90 °F).

SETPOINT SETTINGS 2/2

2/2 Setpoints

Default heat	26.0 C
Min. deadband	1.5 C
Max. heating	32.0 C
Min. cooling	12.0 C
Dehumidify	50% RH

★ Parameter only displayed on models with built in humidity sensor.

SETPOINT PARAMETER DETAILS

Configuration Parameters Default Value	Significance and Adjustments
Default heat Default value: 22.0 °C (73 °F)	**Default Heat** Used for hospitality applications in stand-alone mode only. When devices are in deep unoccupied mode, any movement detected by PIR resets actual occupied set points to fresh room default setting. Default setpoint is used to write to Heating setpoint when thermostat goes to Unoccupied mode. Cooling setpoint is set according to Min. deadband; 18.0 to 26.5 °C (65 to 80 °F). Parameter is only used when Stand-by mode = Rel.
Min. deadband Default value: 1.5 °C (3 °F)	**Minimum Deadband** Minimum deadband value between heating and cooling setpoints applied only when any setpoints are modified. Range: 1.0 to 2.5 °C, 0.5 °C increments (2, 3, 4 or 5 °F, 1.0 °F increments).
Max heating Default value: 32 °C (90 °F)	**Maximum Heating** Maximum occupied and unoccupied heating setpoint adjustment. Range: 4.5 to 32.0 °C (40 to 90 °F).
Min. cooling Default value: 12.0 °C (54 °F)	**Minimum Cooling** Minimum occupied and unoccupied cooling setpoint adjustment. Range: 12.0 to 37.5 °C (54 to 100 °F).
Dehumidify Default value: 50% RH	**Dehumidify** Used only if dehumidification sequence is enabled: Range is: 30-95% RH (models with humidity sensor only).

DISPLAY SETTINGS 1/2
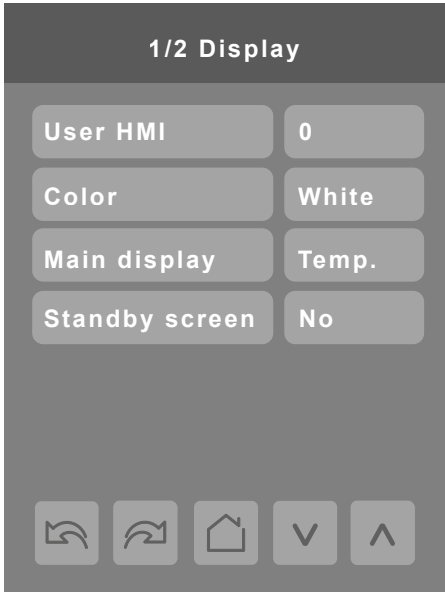
```
        1/2 Display

 User HMI           0
 Color              White
 Main display       Temp.
 Standby screen     No




  ↰   ↱   ⌂   ∨   ∧
```

SETPOINT PARAMETER DETAILS

Configuration Parameters Default Value	Significance and Adjustments
User HMI Default value: 0	**User HMI** Select user HMI type. Range: 0 to 11.
Color Default value: White	**White** Change text colors according to set font colors.
Main display Default value: Temp.	**Main Display** Shows temperature setpoint
Standby screen Default value: No	**Standby Screen** When the device is left unattended for 2 minutes background backlight dims to save screen life. Installers can load a custom image for brand identification.

User HMI for Hospitality

0 (Hospitality)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Room 1705

- Setpoint adjustment
- System mode setting
- Fan mode setting
- Local unit scale adjustment
- Local user language
- User help menu

1 (Hospitality)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Room 1705

- Setpoint adjustment
- System mode setting
- Fan mode setting
- User help menu

2 (Hospitality)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Room 1705

- Local unit scale adjustment
- Local user language
- User help menu

3 (Hospitality)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Room 1705

- Setpoint adjustment
- User help menu

Parameters are model dependent and may not appear on certain models.

4 (Hospitality)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
Room 1705

- Fully locked interface with no user settings

5 (Hospitality)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Room 1705

- Setpoint adjustment
- System mode setting
- User help menu

6 (Hospitality)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Room 1705

- Setpoint adjustment
- System mode setting
- Fan mode setting
- Local unit scale adjustment
- User help menu

7 (Commercial)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Room 1705

- Setpoint adjustment
- System mode setting
- Fan mode setting
- unoccupied mode overdrive
- User help menu

8 (Commercial)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Room 1705

- Setpoint adjustment
- Unoccupied mode override
- Local user language
- User help menu

9 (Commercial)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Room 1705

- Setpoint adjustment
- Unoccupied mode override
- User help menu

10 (Commercial)

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Room 1705

- Setpoint adjustment
- Unoccupied mode override
- User help menu

11 (Commercial)

26.09.2012   2:43 PM
Occupied
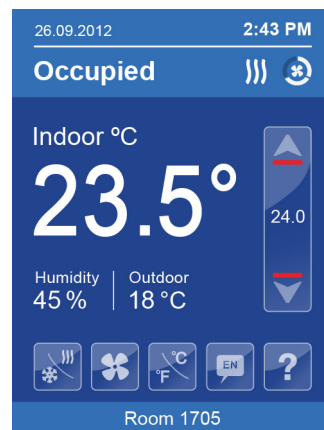Indoor °C
23.5°
24.0
Room 1705

- Setpoint adjustment
- System mode setting
- Unoccupied mode override
- User help menu

Note:

The day/night setback button appears only in unoccupied mode from 7 to 11 in HMI Commercial. If BI2 input is configured as "override", the day/night setback button does not show.

Parameters are model dependent and may not appear on certain models.

Other Functions

26.09.2012   2:43 PM
Occupied
Setpoint °C
23.5°
24.0
Humidity | Outdoor
45 % | 18 °C
Room 1705

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Humidity | Outdoor
45 % | 18 °C
Room 1705

26.09.2012   2:43 PM
Occupied
Indoor °C
23.5°
24.0
Outdoor
18 °C
Room 1705

Local humidity only shows on models with the humidity sensor present and when enabled by configuration property RH Display.

Outdoor temperature display is dependent on receiving a valid networked outdoor temperature value.

Heating only Configuration

Setpoint value shows if main display parameter is set to Setpoint.

Time and Date show only when a network time synchronisation command is received.

On/Off icon is used instead of system mode icon when sequence of operation is set to either heating on or cooling only.

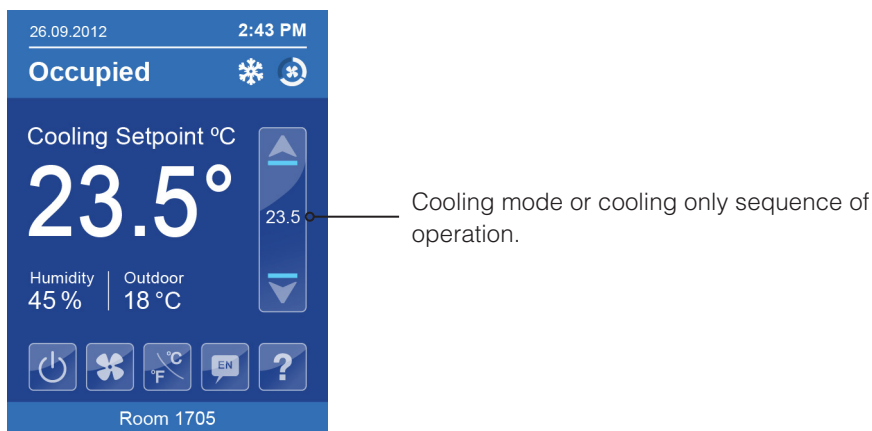| 26.09.2012 | 2:43 PM |
Occupied	))) ❄
Setpoint ºC	
23.5°	24.0
Humidity	Outdoor
45 %	18 °C
⏻ ✿ ℃℉ EN ?	
Room 1705	

Setpoint Adjustment for Cooling Mode

In Cooling mode, the setpoint displayed in the bar is the current occupied cooling setpoint.

During occupied setpoint adjustment, the large digits are temporarily used to show occupied cooling setpoint while it is adjusted.

Normal temperature display resumes after setpoint is adjusted and actual occupied cooling setpoint shows in setpoint bar.

26.09.2012	2:43 PM
Occupied	❄ ❄
Cooling Setpoint ºC	
23.5°	23.5
Humidity	Outdoor
45 %	18 °C
⏻ ✿ ℃℉ EN ?	
Room 1705	

Cooling mode or cooling only sequence of operation.

Viconics Technologies Inc. | 9245 Langelier Blvd. | St.-Leonard | Quebec | Canada | H1P 3K9 | Tel: (514) 321-5660 | Fax: (514) 321-4150

028-0427-00   www.viconics.com | sales@viconics.com   April 2014
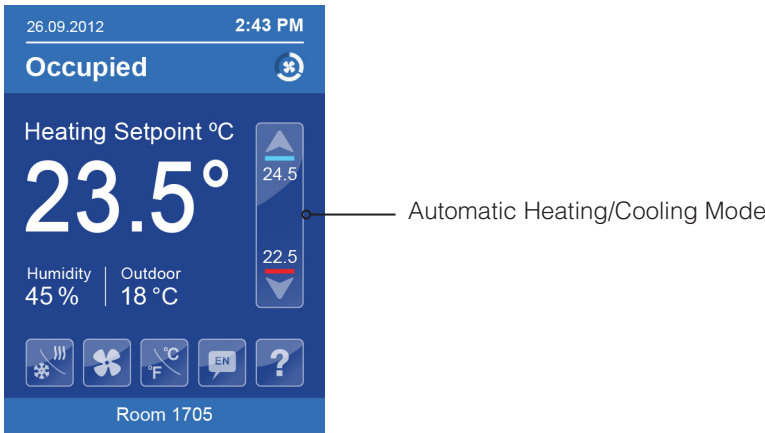
Setpoint Adjustment for Heating Mode

In automatic mode, setpoint showing at the top of the set point bar located directly under the blue line represents the actual occupied cooling setpoint.

During occupied setpoints adjustment, large digits are temporarily used to display the occupied Cooling Setpoint or occupied Heating Setpoint. The actual setpoint is dependent on the last effective demand (heating or cooling). The setpoint on top of the red line represents the actual occupied heating setpoint. The differential between the occupied heating and cooling setpoint is defined by the minimum deadband configuration parameter.
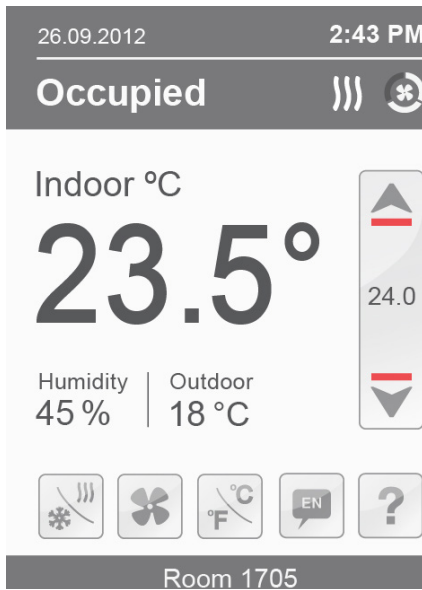
Normal temperature display resumes after setpoints are adjusted and the actual occupied heating and cooling setpoints show in the setpoint bar.

26.09.2012	2:43 PM
Occupied	
Heating Setpoint °C	24.5
23.5°	
Humidity 45%	Outdoor 18 °C	22.5
Room 1705	

Automatic Heating/Cooling Mode

PARAMETER DETAILS

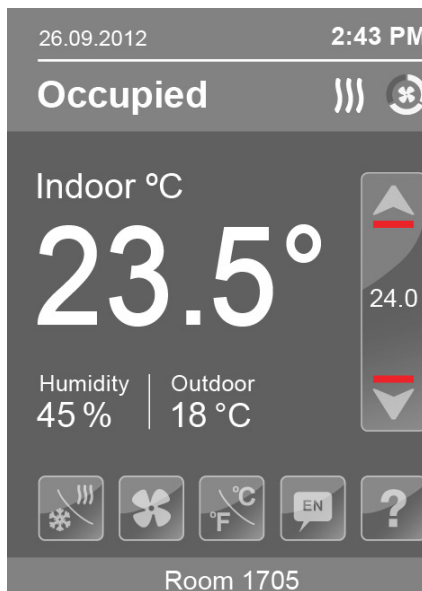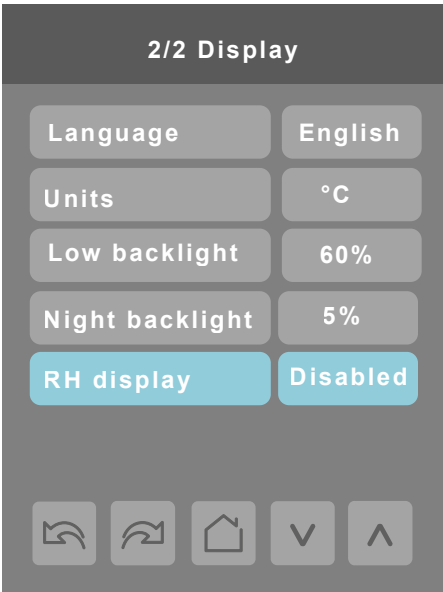| Configuration Parameters Default Value	Significance and Adjustments
Color Default value: White	**Color** Select user HMI colour. Choices: Green, Blue, Brown, and Grey.
Main display Default value: White	**Main Display** Select default value displayed on main display as temperature or setpoint. Choices: Temperature or setpoint.
Standby screen Default value: No	**Standby Screen** Selecting Yes shows a custom image after 2 minutes with no user activity on the touch screen.

CUSTOMIZABLE COLOR OPTIONS

White

Green

Blue

Brown

Grey

DISPLAY SETTINGS 2/2

2/2 Display

Language	English
Units	°C
Low backlight	60%
Night backlight	5%
RH display	Disabled

✱

✱ Parameter only displayed on models with built in humidity sensor.

SETPOINT PARAMETER DETAILS

Configuration Parameters Default Value	Significance and Adjustments
Language Default value: English	**Language** Select language for main display. Choices: English, French, Spanish, Chinese, and Russian
°C or °F Default value: **°C**	**Temperature Units** Sets default local scale value when Terminal Equipment Controller powers up. °C for Celsius. °F for Fahrenheit.
Low backlight Default value: 60%	**Backlight Display** Set display backlight intensity after 2 minutes of keyboard inactivity. Adjustable: 0 to 100%.
Night backlight Default value: 5%	**Night Backlight Display** Set display backlight intensity after 2 minutes of keyboard inactivity. Adjustable: 0 to 100%. Parameter only available for models with motion/light detectors. The screen backlight progressively decreases down to this setting when room is dark. This feature is used mostly in hospitality applications when a darker non obtrusive lighting level is desired when room is dark.
RH display Default value: Disabled	**Relative Humidity Display** Enables display of humidity below room temperature on the display (On): Display %RH. (Off): Do not display %RH. *(models with humidity sensor only)

SERVICE SCREEN VIEWS

The service view screens show the current status of certain points locally at the controller. These points can also be viewed through the network. Service view allows service contractor to visualize the status of key functionality to correctly diagnose operational system issues.

1/6 Service view		
Firmware rev.	**1.0**	— Firmware Revision
Room temp.	**xx.x °C**	— Room Temperature
UI19ChgOver	**xx.x °C**	— Changeover Temperature
UI20 RS temp.	**xx.x °C**	— Supply Temperature
Outdoor temp.	**xx.x °C**	— Outdoor Temperature
Room humidity	**xx.x %RH**	— Room Humidity

★

★ Parameter only displayed on models with built in humidity sensor.

2/5 Service view		
Effective occ.	**Occupied**	— Effective Occupancy
PI cool. dem.	**0%**	— PI Cooling Demand
PI heat. dem.	**0%**	— PI Heating Demand
Cool. dem. limit	**0.0%**	— Cooling Demand Limit
Heat dem. limit	**0.0%**	— Heating Demand Limit
		— Supply Temperature

3/6 Service view

UI16 status	Not active	Universal Input
UI17 status	Not active	Universal Input
UI19 status	Activated	Universal Input

4/6 Service view

Window alarm	Off	Window Alarm
Service alarm	Off	Service Alarm
Filter alarm	Off	Filter Alarm
Local motion	On	Local Motion
Deh. status	Off	Dehumidification

★ Parameter only displayed on models with built in humidity sensor.

5/6 Service view

UO9 Config	Binary	——————o——————— Universal Output
UO10 Config	Binary	——————o——————— Universal Output
UO11 Config	Binary	——————o——————— Universal Output
UO12 Config	Binary	——————o——————— Universal Output

5/5 Service view

Device name: ———o————— Device Name
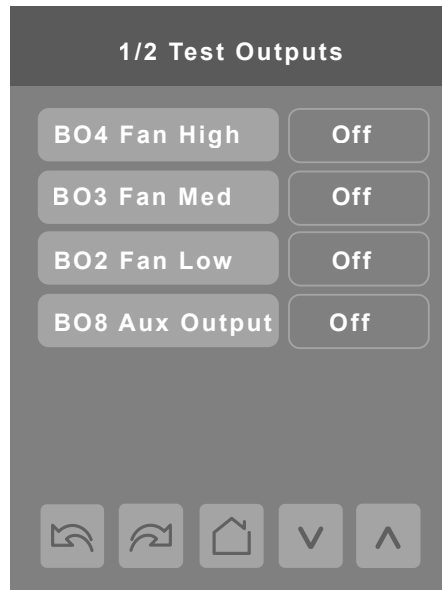
VTR83xxAxxxx ———o————— Model Number
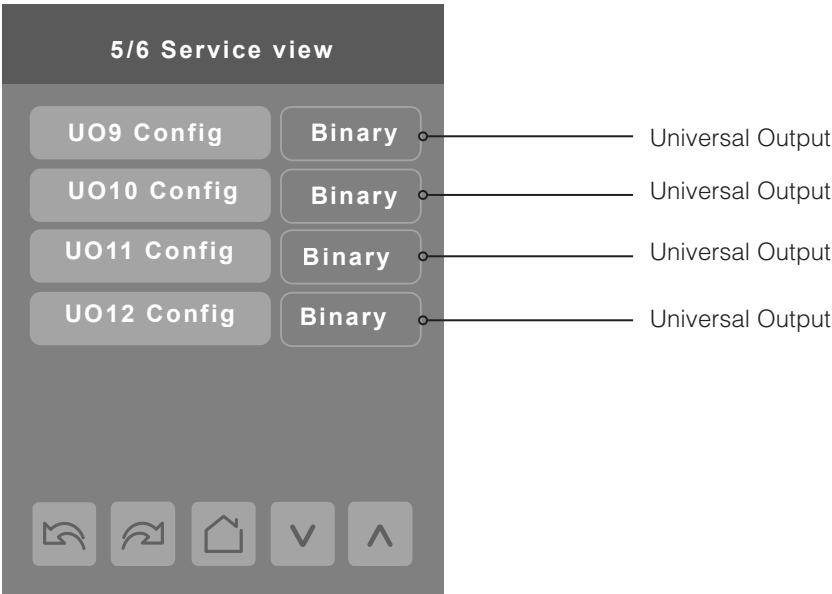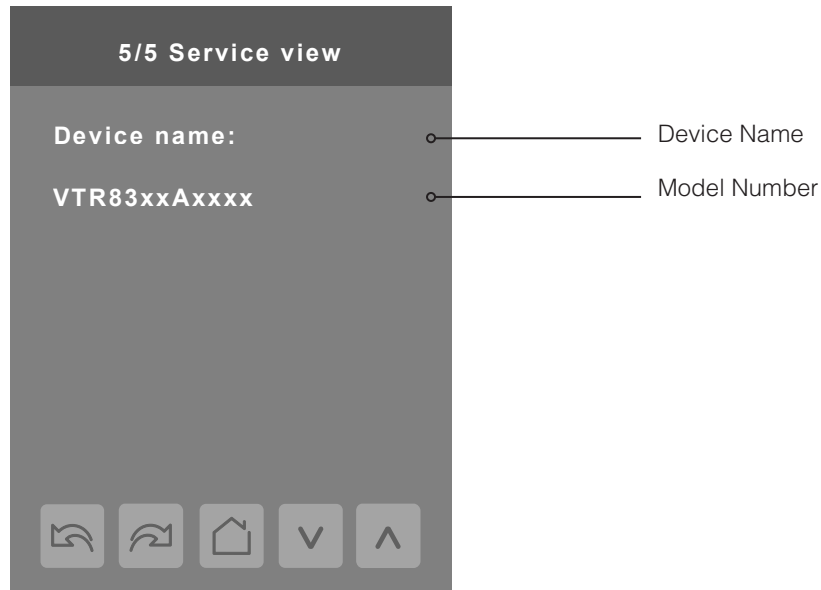
The Model Number is the BACnet® device name automatically assigned when using the current BACnet® addressing scheme based on the MAC address. The network can update and change the device BACnet® name. If changed, the new updated BACnet® device name shows on the screen.

For example, when a SE8300U5500B thermostat with a MAC address of 41 is connected to a network, its default Device Name is SE8300U5x00B-41 and its default BACnet Device ID is 83041.
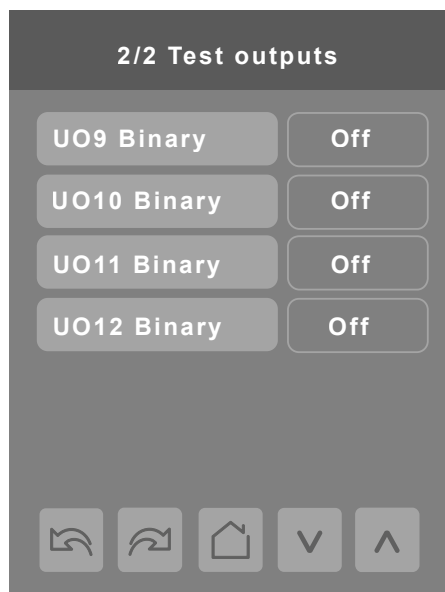
TEST OUTPUTS

```
            1/2 Test Outputs

   ┌─────────────────┐   ┌──────────┐
   │ BO4 Fan High    │   │   Off    │
   └─────────────────┘   └──────────┘
   ┌─────────────────┐   ┌──────────┐
   │ BO3 Fan Med     │   │   Off    │
   └─────────────────┘   └──────────┘
   ┌─────────────────┐   ┌──────────┐
   │ BO2 Fan Low     │   │   Off    │
   └─────────────────┘   └──────────┘
   ┌─────────────────┐   ┌──────────┐
   │ BO8 Aux Output  │   │   Off    │
   └─────────────────┘   └──────────┘



   ┌────┐ ┌────┐ ┌────┐ ┌────┐ ┌────┐
   │ ↩  │ │ ↪  │ │ ⌂  │ │ ∨  │ │ ∧  │
   └────┘ └────┘ └────┘ └────┘ └────┘
```

Note 1: Cooling output can also be used for heating on two pipes systems.

Note 2: The test output screen allows manual override of specified outputs. When any BACnet® network priority array includes a value, the status background shows in red. After any output state is overridden, the command is cancelled after 1 minute of screen inactivity (auto exit to main screen) or when page is exited. Refer to the BACnet® integration guide for more details.

Note 3: Use high caution when manually enabling outputs so as to not cause damage to equipment. It is the responsibility of the Installer or Service Contractor to insure safe operation during usage.

TEST OUTPUTS

CASE A

2/2 Test outputs

UO9 Binary	Off
UO10 Binary	Off
UO11 Binary	Off
UO12 Binary	Off

CASE B

2/2 Test outputs

| UO11 Analog | 0 Vdc |
| UO12 Analog | 0 Vdc |

Note: screen Test outputs are LIVE. Any output gets displayed immediately for any value change according to the following:

1. If any BACnet priority array (1 - 16) includes a value, the displayed state background shows in red.
2. When toggling a value on the screen, the output directly energizes according to the selected value.
3. You can override any output if you bypass the Bacnet array (1 - 16).
4. It is not possible to modify the set Bacnet array values.
5. After any output state gets modified, all overrides get cancelled after 1 minute of button inactivity, or if you scroll from one screen to another screen.

CASE A: screen 2/2 display is dependent on Control type configuration. If mode is set to Floating or On/Off, binary options show.

CASE B: screen 2/2 display is dependent on Control type configuration. If mode is set to Analog, analog options show.

LANGUAGE SELECTION
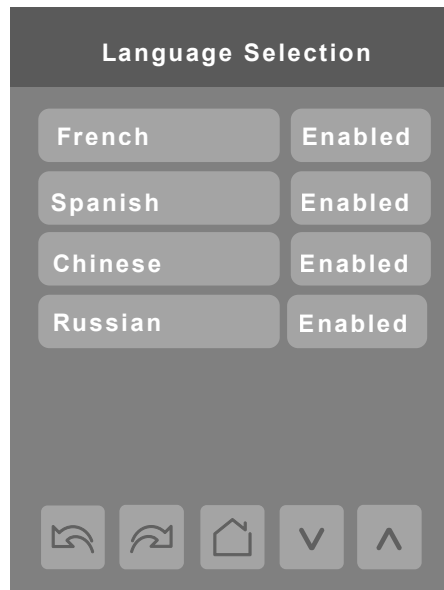
All languages are enabled by default, which means that they will be accessible to users cycling through languages on the display settings menu screen. To change the language selection settings, touch a language on the screen and then use the arrow buttons to disable or enable it. The English language is always enabled.