
ExactLogic BACnet Communicating Thermostat

EXL01645 Sequence Datasheet

California Stat



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Operating Sequence

Standard Occupied

During normal occupied operation the display will show the current room temperature. The first press of either right pair of keys will show the current room setpoint. Additional presses will adjust the setpoint up or down by 0.5 degrees. The thermostat keypad will time out after 5 seconds without a key press, and the display will switch back to displaying the room temperature.

The left pair of keys allows for the adjustment of the fan speed. The current mode is shown with the first key press; additional key presses will show the adjustment to the mode. AV-62 is used to select the number of fan speeds, and AV-63 will show what speed the fan is currently set to. The table below will illustrate what values of AV-62 and AV-63 correspond to the fan speed a desired fan speed selection.

| AV-62 | Mode |
|-------|----------------|
| 0 | AUTO Only |
| 1 | AUTO-ON |
| 2 | OFF-AUTO-ON |
| 3 | OFF-1-2-AUTO |
| 4 | OFF-1-2-3-AUTO |

| AV-63 | Fan Speed |
|-------|-------------|
| 0 | OFF |
| 1 | Fan Speed 1 |
| 2 | Fan Speed 2 |
| 3 | Fan Speed 3 |
| 4 | AUTO |
| 5 | ON |

Internal/External Thermistor Control

The thermostat control sequence can use the internal thermistor, an external thermistor connected to AI-2, or an external network temperature written to AV-10. Setting BV-67 to OFF (default) the thermostat will use the internal thermistor. Setting BV-67 to ON the control sequence will use an external thermistor, either on AI-2 or AV-10. Setting BV-56 to OFF (default) will select the external temperature on AI-2. Setting BV-56 to ON will select the network temperature written to AV-10.

Also by setting BV-56 to ON, the thermostat can also be controlled by the lower temperature read from the internal thermistor or the external temperature selected by BV-56. Setting BV-55 to OFF (default), the thermostat will use the temperature selected by BV-67 for sequence control.

The current controlling temperature is located at AV-20. This value will be displayed on the LCD of the thermostat and should be used on any workstation displays.

Control Sequence – Occupied Digital Heating

When in the occupied mode, the thermostat will maintain a 55°F setpoint (hardcoded). Stage 1 heating will engage when the room temperature drops to 1° below (54°F) the heating setpoint, and will reset off when the room temperature rises to 0.5°F above the heating setpoint. Stage 2 heating will engage if the stage one command has been on for the time delay set at AV-36 and the room temperature is 7° (48°F) below the heating setpoint. Stage 2 will reset off when the room temperature has risen to 2° (53°F) below the heating setpoint.

Control Sequence – Unoccupied Digital Heating

When in the unoccupied mode, stage 1 heating will engage when the room temperature reaches the unoccupied heating setpoint of 40°F (hardcoded), and will reset off when the room temperature reaches 55°F. Stage 2 heating will engage if the stage one command has been on for the time delay set at AV-36 and the room temperature is 5° below (35°F) the unoccupied heating setpoint. Stage 2 will reset off when the room temperature has risen to 10° above (50°F) the unoccupied heating setpoint.

Control Sequence – Modulating Heating

The analog output can be used to maintain a 55°F setpoint (hardcoded) as well. The modulating signal uses the difference between 55° and the room setpoint for its control signal. The control signal is sent to the output when the Stage 1 Heating Request (BV-25) is triggered. This will allow the occupied or unoccupied heating setpoint to command the analog outputs at the correct room temperature. The output voltage levels can be adjusted at AV-40 to 43, allowing for 0-10 or 2-10/10-0 or 10-2 output settings.

Fan Control

This thermostat has only one fan speed. This leaves mode 0 and 1 (AV-62) the only applicable fan speeds for this application. When the fan speed is in AUTO, the thermostat will turn on the fan based on the Stage 1 Heating Request (BV-25). The fan will also start with a Fan Operating Mode set to Continuous, via BV-69.

Standard Unoccupied

During unoccupied operation the thermostat will continue to display the room temperature. When in an unoccupied state pressing one of the right pair of keys will display a message indicating the thermostat is in night mode, preventing the setpoint from being adjusted. To adjust the room setpoint when unoccupied the thermostat must be set to night override.

Control Sequence

When the occupancy is in the unoccupied condition, the room will be controlled by the unoccupied heating setpoint. The fan and heating stage will operate the same as the occupied control sequence.

Night Override

Set the night override by pressing one of the left pair of keys. The display will switch to allow the user to set the night override time. Additional presses of the keys will adjust the time up or down by 0.5 hour increments. The night override can be increase by the keypad up to the override limit set at AV-73, the default is 5 hours. When the thermostat is in night override, the first press of one of the left pair of keys will display the override time remaining. Additional key presses will add/subtract 0.5 hours to the time that was remaining. When the timer reaches zero the thermostat will reenter unoccupied mode.

Once the thermostat has entered the night override mode, the right pair of keys can be used to adjust the room setpoint. The thermostat keypad will time out after 5 seconds without a key press, and the display will switch back to displaying the room temperature.

The thermostat can be set into a night override by writing a value to AV-74 from a Workstation. The value cannot exceed the night override limit set at AV-73. If the night override time is set higher than the limit, the night override timer will be set the limit. The night override limit default is 5 hours.

If the thermostat is command occupied while in night override, the override timer will be cleared to zero and the thermostat will enter a normal occupied mode.

Control Sequence

When the thermostat is in the override mode, the room will be controlled by the occupied heating setpoint. The fan and heating stage will operate the same as the occupied control sequence.

Note: There is no fan control in the override mode. The fan will run in the AUTO mode.

Motion/Humidity Option Card

The Motion/Humidity Option Card can be used for Motion Only, Humidity Only, or Motion/Humidity together. In order to use the Motion Sensor (either stand alone or with Humidity), BV-64 must be set to ACTIVE. The Humidity Sensor can be enabled by setting AV-31 to 4. These settings will automatically provide the required voltage to power the sensors. The motion sensor status will show on BI-1. Once the motion sensor does not sense motion, the delay at AV-81 is used to delay the ACTIVE to INACTIVE command to the Scheduled Occupied command at BO-5, priority array entry 10. The Humidity value is shown on AI-1. The Humidity Sensor will automatically be scaled by setting AV-31 to 4.

Disabling of the Splash, Setup Menu, or Field Service Mode

When the thermostat is installed in a public location there may be times when the setup of the thermostat will need to be disabled to prevent tenants from changing the configuration while still giving them access to change the setpoints and control after hours modes. The following points have been added to allow this:

- BV-57 = Setting ACTIVE will disable the “EXACTLOGIC” splash display after key presses
- BV-58 = Setting ACTIVE will disable access to the Setup Menu where the Network/MAC/Baud Rate/etc are set
- BV-59 = Setting ACTIVE will disable access to the Field Service Mode where Time/Schedule/Setpoints/etc are set

Installation Setup

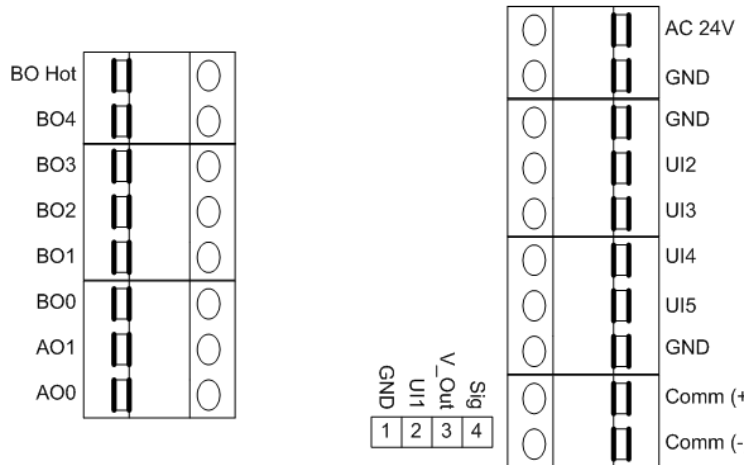


Fig. 1

*Note: BO Hot usually 24VAC/DC input for Relays or R

| | | |
|----------|-------|----------------------------|
| AC 24V | ..... | 24VAC/DC Hot |
| GND | ..... | Neutral/Ground |
| GND | ..... | Neutral/Ground |
| UI2 | ..... | Universal Input 2 |
| UI3 | ..... | Universal Input 3 |
| UI4 | ..... | Universal Input 4 |
| UI5 | ..... | Universal Input 5 |
| GND | ..... | Neutral/Ground |
| Comm (+) | ..... | Network Positive Line |
| Comm (-) | ..... | Network Negative Line |
| BO Hot | ..... | 24VAC/DC Input for Relays* |
| BO4 | ..... | Relay 5 Output, 24VAC/DC |
| BO3 | ..... | Relay 4 Output, 24VAC/DC |
| BO2 | ..... | Relay 3 Output, 24VAC/DC |
| BO1 | ..... | Relay 2 Output, 24VAC/DC |
| BO0 | ..... | Relay 1 Output, 24VAC/DC |
| AO1 | ..... | Analog Output 1, 0-10V |
| AO0 | ..... | Analog Output 0, 0-10V |

| | | |
|---|-------|-------------------|
| 1 | ..... | Neutral/Ground |
| 2 | ..... | Universal Input 1 |
| 3 | ..... | Analog Output 2 |
| 4 | ..... | Reserved |

Output Wiring

| Output | Function |
|--------|-------------------------|
| BO0 | Fan |
| BO1 | Stage 1 Heating Command |
| BO2 | Stage 2 Heating Command |
| BO3 | |
| BO4 | |
| AO0 | Heating 0-10 Vdc 0-100% |
| AO1 | Heating 10-0 Vdc 0-100% |

Input Wiring

| Output | Function |
|--------|---------------------|
| UI2 | External Space Temp |
| UI3 | |
| UI4 | |
| UI5 | |

Reserved BACnet Points

The following are points reserved by the thermostat for operation.

Analog Inputs

| Instance | Object Name | Description | Read/Write | Default |
|----------|---------------------|--|------------|----------|
| AI-0 | Internal Thermister | Reading of the internal thermister in counts. 0-1024 | R | variable |
| AI-1 | Humidity | Reading from the Humidity sensor add-on card | R | variable |
| AI-2 | Ext. Room Temp | Optional external room temperature input | R | variable |
| AI-3 | Analog Input 03 | Reading of the external input 3 in counts. 0-1024 | R | variable |
| AI-4 | Analog Input 04 | Reading of the external input 4 in counts. 0-1024 | R | variable |
| AI-5 | Analog Input 05 | Reading of the external input 5 in counts. 0-1024 | R | variable |

Analog Outputs

| Instance | Object Name | Description | Read/Write | Default |
|----------|---------------------|-------------------------------------|------------|---------|
| AO-0 | Heat 0-10V (0-100%) | 0-10V output for control of heating | R/W | 0.0 |
| AO-1 | Heat 10-0V (0-100%) | 10-0V output for control of heating | R/W | 10.0 |
| AO-2 | Analog Output 2 | Variable 0-14VDC, 150mA output | R/W | 0.0 |

Analog Values

| Instance | Object Name | Description | Read/Write | Default |
|----------|-------------------|--|------------|---------|
| AV-0 | Mode of Operation | The mode that the thermostat is currently in. 0 = Heat Mode 1 = Cool Mode 2 = Idle 3 = Afterhours 4 = Unoccupied Idle 5 = Unoccupied Heat Mode 6 = Unoccupied Cool Mode | R | 4 |
| AV-1 | Analog Value 001 | | | |
| AV-2 | Analog Value 002 | | | |
| AV-3 | Analog Value 003 | | | |
| AV-4 | Current Htg SP | The setpoint that controls heating. If the room temperature goes below this setpoint the thermostat will enter heating mode. | R | 80.0°F |
| AV-5 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | | |
| AV-6 | Heating SP | The setpoint used for heating during occupied time. This is hardcoded and cannot change | R | 55.0°F |
| AV-7 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 0 |
| AV-8 | Heat Signal | Current heating signal as a percent | R | 0% |

| | | | | |
|-------|---------------------|--|-----|---------|
| AV-9 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 0 |
| AV-10 | Network Temperature | Temperature used for control that is written from a different network device | R/W | 0°F |
| AV-11 | Analog Value 011 | | | |
| AV-12 | Analog Value 012 | | | |
| AV-13 | Analog Value 013 | | | |
| AV-14 | Analog Value 014 | | | |
| AV-15 | Analog Value 015 | | | |
| AV-16 | Analog Value 016 | | | |
| AV-17 | Analog Value 017 | | | |
| AV-18 | Analog Value 018 | | | |
| AV-19 | Room Temp Hi | The higher temperature, network or internal thermistor | R | varies |
| AV-20 | Room Temp | Selected from either AI-2 or AI-0. BV-67 is used for selection. This is the value displayed on the LCD of the thermostat and should be used to display the temperature on any workstation display. | R | varies |
| AV-21 | Analog Value 021 | | | |
| AV-22 | Analog Value 022 | | | |
| AV-23 | Analog Value 023 | | | |
| AV-24 | Analog Value 024 | | | |
| AV-25 | Analog Value 025 | | | |
| AV-26 | Analog Value 026 | | | |
| AV-27 | Analog Value 027 | | | |
| AV-28 | Analog Value 028 | | | |
| AV-29 | Analog Value 029 | | | |
| AV-30 | AI-0 Setup | Parameter used to set the input type. 0 = counts 1 = temperature 2 = 4-20mA 3 = 0-5V 4 = 0-10V 5 = pulse | R/W | 1 |
| AV-31 | AI-1 Setup | See AV-30 | R/W | 0 |
| AV-32 | AI-2 Setup | See AV-30 | R/W | 0 |
| AV-33 | AI-3 Setup | See AV-30 | R/W | 0 |
| AV-34 | AI-4 Setup | See AV-30 | R/W | 0 |
| AV-35 | AI-5 Setup | See AV-30 | R/W | 0 |
| AV-36 | Stage 2 Start Delay | Time delay between stage 1 and stage 2 heat commands | R/W | 300 sec |
| AV-37 | Analog Value 037 | | | |
| AV-38 | Analog Value 038 | | | |
| AV-39 | Analog Value 039 | | | |
| AV-40 | AO-0 Max Voltage | Maximum voltage outputted on AO-0 | R/W | 100% |
| AV-41 | AO-0 Min Voltage | Minimum voltage outputted on AO-0 | R/W | 0% |
| AV-42 | AO-1 Max Voltage | Maximum voltage outputted on AO-1 | R/W | 100% |
| AV-43 | AO-1 Min Voltage | Minimum voltage outputted on AO-1 | R/W | 0% |
| AV-44 | Analog Value 044 | | | |
| AV-45 | Analog Value 045 | | | |
| AV-46 | Analog Value 046 | | | |

| | | | | |
|-------|----------------------|--|-----|---------------|
| AV-47 | Analog Value 047 | | | |
| AV-48 | Analog Value 048 | | | |
| AV-49 | Analog Value 049 | | | |
| AV-50 | Heating Kp | Proportional Constant for the heating PI calculation | R/W | 12 |
| AV-51 | Heating Ki | Integral Constant for the heating PI calculation | R/W | 1 |
| AV-52 | Analog Value 052 | | | |
| AV-53 | Analog Value 053 | | | |
| AV-54 | Analog Value 054 | | | |
| AV-55 | Analog Value 055 | | | |
| AV-56 | Analog Value 056 | | | |
| AV-57 | Analog Value 057 | | | |
| AV-58 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 1.6 |
| AV-59 | Pseudo Ave Time Base | Factor used to average the room temperature. A small number will allow the room temperature to change faster over time. A large number will cause the room temperature to change slower over time. | R | 100 |
| AV-60 | Cal Offset | The calibration offset for the internal thermistor. | R | variable |
| AV-61 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 5.0/2.5 |
| AV-62 | # of Fan Speeds | Select the number of fan speeds for a multispeed fan. 0 = Auto Only 1 = AUTO - ON 2 = Off - AUTO - ON 3 = Off-1-2-AUTO 4 = Off-1-2-3-AUTO | R/W | 4 |
| AV-63 | Current Fan Speed | The fan speed the thermostat is currently running. 0 = OFF 1 = Fan Speed 1 2 = Fan Speed 2 3 = Fan Speed 3 4 = AUTO 5 = ON | R | 4 |
| AV-64 | Vacant Clg SP | Used in Hotel Mode. When a room is known vacant, the setpoint can be set below the unoccupied setpoint. | R/W | 85.0°F |
| AV-65 | Vacant Htg SP | Used in Hotel Mode. When a room is known vacant, the setpoint can be set below the unoccupied setpoint. | R/W | 55.0°F |
| AV-66 | Room Setpoint | The occupied room setpoint. | R | 55.0°F |
| AV-67 | Occupied Sp Hi Limit | The maximum occupied room setpoint allowed. | R | 55.0°F |
| AV-68 | Occupied Sp Lo Limit | The minimum occupied room setpoint allowed | R | 55.0°F/13.0°C |
| AV-69 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 1.0/0.5 |
| AV-70 | Htg Offset | The offset from Room Setpoint used to calculate the Occupied Heating SP | R/W | 1.0°F/0.5°C |
| AV-71 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 80.0/27.0 |
| AV-72 | Unoccupied Htg | The heating setpoint used when the thermostat is | R | 40.0°F |

| | SP | unoccupied. | | |
|--------|-------------------|--|-----|----------|
| AV-73 | After Hours Limit | The maximum hours the thermostat is allowed to run during afterhours time. Setting this will set the thermostat to occupied operation. (0-99.9 hrs) | R/W | 5.0 hrs |
| AV-74 | After Hours Timer | The current amount of afterhours time left. | R | 0.0 hrs |
| AV-75 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 0 |
| AV-76 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 0 |
| AV-77 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 0 |
| AV-78 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 0 |
| AV-79 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 0 |
| AV-80 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | 0 |
| AV-81 | Motion OFF Delay | The amount of time to delay the ON->OFF transition of the motion sensor occupied command after no motion is detected | R/W | 900 sec |
| AV-82 | Analog Value 082 | | | |
| AV-83 | Analog Value 083 | | | |
| AV-84 | Analog Value 084 | | | |
| | | | | |
| | | | | |
| | | | | |
| AV-100 | Analog Value 100 | Internal thermistor display descriptor. . The present value is automatically transferred. The AV description holds the descriptor to display. | R | variable |
| AV-101 | Analog Value 101 | Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display. | R/W | |
| AV-102 | Analog Value 102 | Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display | R/W | |
| AV-103 | Analog Value 103 | Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display | R/W | |
| AV-104 | Analog Value 104 | Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display | R/W | |
| AV-105 | Analog Value 105 | Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display | R/W | |
| AV-106 | Analog Value 106 | Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display | R/W | |
| AV-107 | Analog Value 107 | Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display | R/W | |
| AV-108 | Analog Value 108 | Display descriptor. Transfer the value to display to | R/W | |

| | | | | |
|--------|------------------|---|-----|--|
| | | the present value. The AV description holds the descriptor to display | | |
| AV-109 | Analog Value 109 | Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display | R/W | |
| AV-110 | Analog Value 110 | Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display | R/W | |
| AV-111 | Analog Value 111 | Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display | R/W | |
| AV-112 | Analog Value 112 | Outside Air Display descriptor. Transfer the value to display to the present value. The AV description holds the descriptor to display | R/W | |

Binary Inputs

| Instance | Object Name | Description | Read/Write | Default |
|----------|-----------------|---|------------|---------|
| BI-0 | Binary Input 00 | | R | |
| BI-1 | Motion | Motion sensor status from the add-on card | R | |
| BI-2 | Binary Input 02 | | R | |
| BI-3 | Binary Input 03 | | R | |
| BI-4 | Binary Input 04 | | R | |
| BI-5 | Binary Input 05 | | R | |

Binary Outputs

| Instance | Object Name | Description | Read/Write | Default |
|----------|-------------------------|---|------------|---------|
| BO-0 | Fan | Output for Fan Control | R/W | OFF |
| BO-1 | Stage 1 Heating Command | Output for stage 1 heat | R/W | ON |
| BO-2 | Stage 2 Heating Command | Output for stage 2 heat | R/W | OFF |
| BO-3 | Binary Output 3 | | R/W | OFF |
| BO-4 | Binary Output 4 | | R/W | OFF |
| BO-5 | Scheduled Occupied | Logical point only. Used for scheduling purposes. INACTIVE is unoccupied. | R/W | OFF |

Binary Values

| Instance | Object Name | Description | Read/Write | Default |
|----------|------------------|---|------------|---------|
| BV-0 | Bad Sensor Alarm | Alarm for a bad internal thermistor | R | OFF |
| BV-1 | Binary Value 001 | | | |
| BV-2 | Binary Value 002 | | | |
| BV-3 | Binary Value 003 | | | |
| BV-4 | Binary Value 004 | | | |
| BV-5 | Binary Value 005 | | | |
| BV-6 | Binary Value 006 | | | |
| BV-7 | Binary Value 007 | | | |
| BV-8 | Binary Value 008 | | | |
| BV-9 | Binary Value 009 | | | |
| BV-10 | Program Status | Used to determine if the sequence was loaded correctly on a BACnet Restore or power up. | R | OFF |
| BV-11 | Binary Value 011 | | | |
| BV-12 | Binary Value 012 | | | |
| BV-13 | Binary Value 013 | | | |
| BV-14 | Binary Value 014 | | | |
| BV-15 | Binary Value 015 | | | |
| BV-16 | Binary Value 016 | | | |
| BV-17 | Binary Value 017 | | | |
| BV-18 | Binary Value 018 | | | |
| BV-19 | Binary Value 019 | | | |
| BV-20 | Binary Value 020 | | | |
| BV-21 | Binary Value 021 | | | |
| BV-22 | Binary Value 022 | | | |
| BV-23 | Binary Value 023 | | | |
| BV-24 | Binary Value 024 | | | |
| BV-25 | Stage 1 Request | The room temperature has dropped below the stage 1 setpoints, stage 1 heat will be commanded ON | R | OFF |
| BV-26 | Stage 2 Request | The room temperature has dropped below the stage 2 setpoints, stage 2 heat will be commanded ON | R | OFF |
| BV-27 | Stage 2 Enabled | The Stage 2 Start Delay (AV-36) has expired allowing a stage 2 heat request to command the output | R | OFF |
| BV-28 | Binary Value 028 | | | |
| BV-29 | Binary Value 029 | | | |
| BV-30 | Binary Value 030 | | | |
| BV-31 | Binary Value 031 | | | |
| BV-32 | Binary Value 032 | | | |
| BV-33 | Binary Value 033 | | | |
| BV-34 | Binary Value 034 | | | |
| BV-35 | Binary Value 035 | | | |
| BV-36 | Binary Value 036 | | | |
| BV-37 | Binary Value 037 | | | |
| BV-38 | Binary Value 038 | | | |
| BV-39 | Binary Value 039 | | | |

| | | | | |
|-------|--------------------------|--|-----|-----|
| BV-40 | Occupied Status | The status of this point switches the thermostats occupancy settings. ON when the thermostat is in Occupied Setpoint Mode or After Hours Mode. | R | OFF |
| BV-41 | Opt. Start Warmup | A Warmup command has been sent to the thermostat. When ON the thermostat will switch to occupied settings. | R/W | OFF |
| BV-42 | Opt. Start Cooldown | A Cooldown command has been sent to the thermostat. When ON the thermostat will switch to occupied settings. | R/W | OFF |
| BV-43 | Occ Set point Mode | The thermostat has been commanded occupied via BO-5, or a Warmup/Cooldown command has been sent via BV-41/BV-42. | R | OFF |
| BV-44 | After Hours Status | The thermostat has been set to afterhours mode. When ON the thermostat will switch to occupied settings. | R | OFF |
| BV-45 | Reserved | This point is reserved for internal thermostat use and its value cannot be changed | R | OFF |
| BV-46 | Binary Value 046 | | | |
| BV-47 | Binary Value 047 | | | |
| BV-48 | Binary Value 048 | | | |
| BV-49 | Update Descriptors | When ON any descriptor change will be sent the thermostats LCD, this point will auto reset to OFF. | R/W | OFF |
| BV-50 | | | | |
| BV-51 | | | | |
| BV-52 | | | | |
| BV-53 | | | | |
| BV-54 | | | | |
| BV-55 | Temperature Control Mode | OFF = Use the temperature selected by BV-67 for control ON = Use the lower temperature of the internal thermistor on AI-0 or the external temperature selected by BV-56 for control | R/W | OFF |
| BV-56 | Ext Temp Local/Remote | OFF = External Temperature is from AI-2 ON = External Temperature is from AV-10 | R/W | OFF |
| BV-57 | Disable Splash | When ACTIVE, the "EXACTLOGIC" splash will not show after key presses | R/W | OFF |
| BV-58 | Disable Setup Menu | When ACTIVE, there will be no access to the Setup Menu where the Network/MAC/Baud Rate is set | R/W | OFF |
| BV-59 | Disable FSM Menu | When ACTIVE, there will be not access to the Field Service Mode where the Time/Schedule/Point Access is set | R/W | OFF |
| BV-60 | Binary Value 060 | | | |
| BV-61 | Binary Value 061 | | | |
| BV-62 | Binary Value 062 | | | |
| BV-63 | Binary Value 063 | | | |
| BV-64 | Enable Motion | When ACTIVE, the power to the Motion add-on card is set to the proper voltage | R/W | OFF |
| BV-65 | Binary Value 065 | | | |
| BV-66 | Disable Unit | When ON this point will disable and lockout all analog and binary outputs. | R/W | OFF |

| | | | | |
|--------|--------------------|--|-----|-----|
| BV-67 | Room Temp Select | When OFF, the internal thermistor is selected for the control sequence. When ON, an external thermistor attached to AI-2 is selected for control of the sequence | R/W | OFF |
| BV-68 | Backlight Off/On | When ON the LCD backlight will remain on | R/W | OFF |
| BV-69 | Fan Op Mode | Controls if the fan will cycle or run continuously. OFF = Cycle, ON = Continuous, BV-40 must also be ON. | R/W | OFF |
| BV-70 | Room Vacant Status | When ON the thermostat will run on Vacant Heating/Cooling setpoints, AV-64/AV-65. | R/W | OFF |
| BV-71 | C/F | Sets the thermostat to display temperatures in Celsius or Fahrenheit. This point is set through the setup menu. ON = F, OFF = C | R | ON |
| BV-72 | Binary Value 072 | | | |
| BV-73 | Binary Value 073 | | | |
| BV-74 | Hotel Mode | This point is reserved for internal zone damper use and its value cannot be changed | R | OFF |
| | | | | |
| BV-100 | Binary Value 100 | Enable internal thermistor descriptor | R/W | ON |
| BV-101 | Binary Value 101 | Enable descriptor | R/W | OFF |
| BV-102 | Binary Value 102 | Enable descriptor | R/W | OFF |
| BV-103 | Binary Value 103 | Enable descriptor | R/W | OFF |
| BV-104 | Binary Value 104 | Enable descriptor | R/W | OFF |
| BV-105 | Binary Value 105 | Enable descriptor | R/W | OFF |
| BV-106 | Binary Value 106 | Enable descriptor | R/W | OFF |
| BV-107 | Binary Value 107 | Enable descriptor | R/W | OFF |
| BV-108 | Binary Value 108 | Enable descriptor | R/W | OFF |
| BV-109 | Binary Value 109 | Enable descriptor | R/W | OFF |
| BV-110 | Binary Value 110 | Enable descriptor | R/W | OFF |
| BV-111 | Binary Value 111 | Enable descriptor | R/W | OFF |
| BV-112 | Binary Value 112 | Enable outside air descriptor | R/W | OFF |