

CATALYST BUILDING MANAGEMENT SYSTEM INSTRUCTIONS



Eyemart Express has partnered with ProStar Energy Solutions in an energy Management Program to reduce energy usage and costs. The installation of your new ProStar Energy Solutions CATALYST Building Management System is now complete. This solution offers the versatility to use a digital thermostat (sensor) to allow setpoint adjustments in tandem with the written setpoints from the elQ platform, for ease in optimizing space comfort.

HOW IT WORKS

Primary setpoints are first set within the web interface for the ProStar Energy Solutions CATALYST BMS. After the primary base setpoints have been established in the elQ Platform (web interface) the digital sensor can be used to make setpoint adjustments (for ease). The current active setpoints for each respective heating and air conditioning system will be displayed on the elQ Platform as shown in the yellow highlighted box below.

These setpoints are assigned from the **Group setpoint page** of the elQ Platform. Each heating and air conditioning unit must be assigned a "**Group**" (yellow arrow). Inside of each **Group** will be an occupancy schedule as well as an occupied and unoccupied heating and cooling setpoints.



MAKING ADJUSTMENTS WITH THE THERMOSTAT

Adjustments can be made by changing the base setpoints on the elQ Platform from the group above or via override. Override can be performed from the platform home tile or from the BAPI digital thermostat sensor via a setting selector switch in the elQ platform. This can be found in the **"Settings Menu**" under the **"Space**" submenu.







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		Status	Faults T	esting	Notes G	roups Set	tings						
Space	Unit Faults	Enhanced Venti	lation										
Unit Name Unit01 Unit02 Unit03	Serves	Group Setpoints & Schedule Group 1 Group 1 Group 1	Setpoin Occupied Heating 66 °F 66 °F 66 °F	ts are manag Occupied Cooling 69 °F 69 °F 69 °F	ted in the "Gro Unoccupied Heating 65.0 65.0 65.0	ups" tabs. Unoccupied Cooling 78.0 78.0 78.0	Optimum Stop Offset Range 2 °F 2 °F 2 °F 2 °F	Unoccupied Override Time 60 min 60 min	CO2. Setpoint 1000 ppm 1000 ppm 1000 ppm	Setpoint Adjust Selection Space Sensor Space Sensor Space Sensor	Setpoint Adjust Range 3.0 °F 5.0 °F 3.0 °F	<u>Not Available Whe</u> Setpoint Adjust Reset	<u>n Using Space Sensor</u> Setpoint Adjust Reset Time
									S4	et Space Sensor Home Tile Space Sensor	7		
Weather Weather Comfort Map Ma	r Station Zip Code r Station Location: Percent Alert rker Colorization	80125 Littleton 80 % Enabled											



When "**Home Tile**" is selected, adjustment arrows appear on the screen for the unit selected (*This* allows deviation from the base setpoint, and will DISABLE the override abilities of the BAPI thermostat digital sensor).

When the "**Space Sensor**" selection is enabled, the adjustment arrows will be removed from the home screen and override functions will be enabled at the BAPI digital sensor. The BAPI digital sensor will always display the current Space Temperature on the screen unless another button is pressed.







BAPI DIGITAL THERMOSTAT SENSOR OVERVIEW

OCCUPIED OR UNOCCUPIED ICON

When "PERSON" is an empty outline, the space is in the Unoccupied Mode. When the "PERSON" is filed/solid, the space is in the Occupied Mode.

Active **Heating** or **Cooling Mode** will be displayed here, with respective icons (flame or snowflake).

Pressing the "PERSON" button when the space is in the _____ Unoccupied Mode will cause the space to enter the Occupied Mode for length of time set in the elQ platform. Space Temperature will be displayed unless the Setpoint Select Button* is pressed in which case this will display the Current Setpoint.

Setpoint Select Button*

Press "RED (up) arrow" to increase the Current Setpoint

Press "**BLUE** (down) arrow" to decrease the Current Setpoint

- *To adjust the space setpoint, press the **Setpoint Select Button**. This will replace the current Space Temperature value on the screen with the Current Setpoint.
- Use the **RED (up)** and **BLUE (down)** arrow buttons to raise or lower the setpoint.
 - By default, the system allows the thermostat to issue up to a 3° F (adjustable) variance from the primary setpoint programmed from the elQ Platform.
 - The Current Setpoint that is displayed when the Setpoint Select Button is pressed is dependent on how close the current Space Temperature reading is to the Heating and Cooling setpoints.
 - If the space temperature is closer to the Cooling Setpoint, the Cooling Setpoint will be displayed.
 - If the space temperature is closer to the Heating Setpoint, the Heating Setpoint will be displayed.
 - The elQ Platform writes a heating setpoint and a cooling setpoint to the unit controller. However, to simplify things, the BAPI digital thermostat only displays one setpoint and will automatically adjust <u>both</u> the heating and the cooling setpoint if a change is made at the thermostat.
- After raising or lowering the setpoint to the desired temperature, press the Setpoint Select Button, to save the setpoint change (this is a temporary override, and the setpoint will revert to it's primary setpoint, once the space temperature is satisfied.
- Any permanent setpoint change should be established in the elQ Platform (web interface).







SETPOINT ADJUSTMENT VIA THE BAPI DIGITAL THERMOSTAT:

System setpoints can be modified based on an adjustment via the thermostat:

Example scenario:

74° F Cooling setpoint & 66° F Heating setpoint

67° F Current Space Temperature (shown on the BAPI Digital Thermostat display)

Raising the heating setpoint:

- Press the Setpoint Select Button, and 66° F setpoint will be displayed.
- Pressing the red arrow (up) twice, will increase the setpoint to 68° F.
- Based on this change, the unit would be sent a heating command.
- This will effectively adjust the setpoint in the controller from:

74° F Cooling setpoint & 66° F Heating setpoint

to

76° F Cooling setpoint & 68° F Heating setpoint



