

User Guide:

IntelliZone2 MasterStat System
Communicating with Humidity Control Thermostat

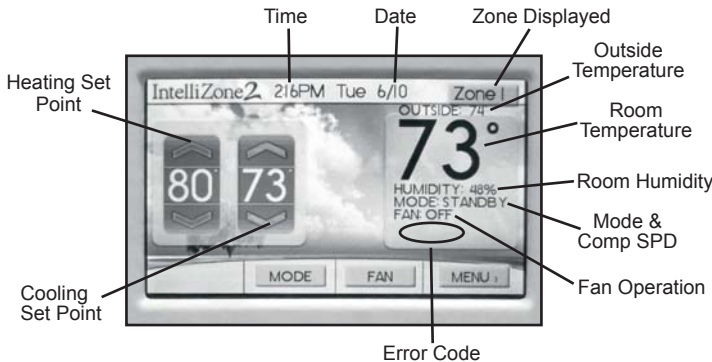


IntelliZone2 MasterStat Communicating with Humidity Control

IntelliZone2 MasterStat Thermostat User Information

This thermostat is a wall mounted, low-voltage thermostat which maintains room temperature by controlling the operation of a heating and air conditioning system. Batteries are not required; temperature and mode settings are preserved with the power off. This communicating thermostat communicates via a 4-wire Modbus protocol and will only operate with the IntelliZone2 and Aurora AXB.

Thermostat Operation



NOTE: Outdoor temperature is only displayed if an outdoor sensor is installed.

To select a MODE, press the screen button MODE, and then press the desired operating mode.

- OFF
- HEAT
- COOL
- AUTO (heat and cool as needed)
- E-HEAT

Adjusting Temperature

(Temporary Override in Programmable models)

Press the blue up or down arrow to increase or decrease the cooling temperature set point. Press the red up or down arrow to increase or decrease the heating temperature set point. Depending on the selected mode one or both sets of the up/down arrows will be selectable.

If a programmed schedule is active, the cancel button in the lower left hand corner of the screen will show up when temperature or mode selections are made. Select the button to cancel any changes that were made.

Menu

Press the Menu button.



NOTE: The humidity function must be enabled by the installer for it to display on this screen. If your system does not use a humidifier this function may not be enabled.

Fan Operation

The thermostat can operate the fan in three ways:
AUTO (on only during heating and cooling operation) (DEFAULT)
CONTINUOUS (always on)
INTERMITTENT (cycles fan)

From the Home screen or Menu Screen, press the Fan button. Select the operation you desire as described above by pressing the up and down arrows ▲▼.



Intermittent Fan

Temperature conditions can vary widely between the thermostat location and the extremities of the space the thermostat serves. This air stratification problem can be especially pronounced during mild outdoor conditions when long periods elapse between space conditioning demands from the thermostat. This intermittent fan operation can also improve the performance of air cleaning or special filtration systems that locate the cleaning or filtration media at the return air side of the fan. If the FAN hasn't been on for an hour, the fan will start cycling based on the times that the user enters in the set up of Intermittent Fan.

To turn intermittent fan on select FAN on main screen and then INTERMITTENT, then press OFF next to ON TIME. Press the up and down arrows ▲▼ on the right hand side to adjust the fan on time, this is the amount of time you want the fan to be energized. Default is OFF. Ranges are OFF, or 5-20 minutes in 5 minute increments. Press the box to the right of OFF TIME this is the time the fan will be off. Press the up and down arrows ▲▼ on the right hand side to adjust the fan off time. Ranges are 5-40 in 5 minute increments. Fan ON and OFF cycles will continue until the fan has been energized by a call for heating or cooling.

The zones can be selected by touching the upper right screen text noting the zone. In this way you can cycle through all the active zones to view and change their configurations. If intermittent fan operation is desired in more than one zone then all zones should use the same ON/OFF times otherwise the last zone that was set will be followed for all zones.

Humidity

The humidity function must be installed by the installer for this screen to be visible. If your system does not use a humidifier then this option may not be enabled. This allows adjustment of Humidification and Dehumidification settings. Options are Auto, Manual, factory default setting for Dehumidification is "Auto". Humidification "Auto" is only available if an outdoor sensor is installed. Manual humidity choices range from 15% to 50% in 1% increments. Dehumidification choices range from 35% to 65% in 1% increments.

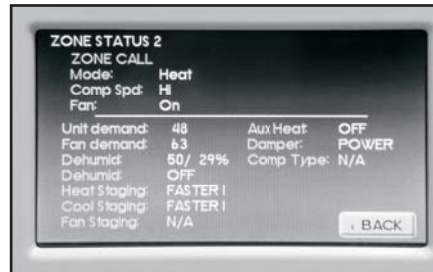


Zone

This screen shows the status of the IntelliZone2 system on one screen. Displayed information includes zone size, priority, normalized zone size, zone temperature set points, zone temp, heating or cooling call, and damper open or closed.

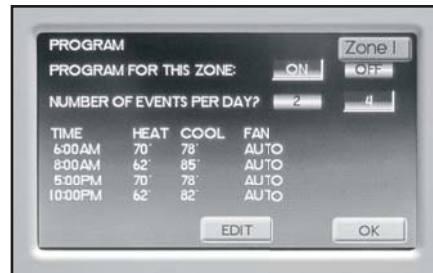


From the 'Zone' screen, press next. This screen shows the information the IntelliZone2 system is sending to the Aurora controls and what the Aurora controls are responding.



Programming Your Thermostat Preset Programming

Preset options will step you through the programming. Simply select the temperatures and then view the completed program.



Programming a Day or a Series Of Days

After selecting the programming screen, you have the option of programming everyday, weekdays, weekends, or individual days. Once you've selected a certain day to program, a screen appears that allows you to set the time, heat setting, cool setting, and fan operation for each event.

1. From the Program menu, select program ON.
2. Select the number of events each day, 2 or 4.
3. You can program each day differently, or every day the same or the weekdays or weekends the same.
4. Select Zone in upper right hand corner to change zones. Steps 2 and 3 will need to be completed for each zone.

Copying a Program From One Day to Another

In the PROGRAM menu, there is an option to COPY. The option can be used to copy the program from one day to another day. After COPY is selected, the thermostat will prompt you for which day to copy from. Next, it will prompt you for which day to copy the program to. After these selections, it will then confirm what is being copied to where.



Settings

Set Date and Time

NOTE: If this thermostat is installed with an AWL and AWL Time Synchronization is enabled then Date and Time will be updated via the internet and can't be manually adjusted, only the Time Format can be changed. If AWL Time Synchronization is disabled and no AWL is installed then follow the steps below for setting Date and Time.

1. From the home screen, press Menu, then press Settings, then press Date/Time
2. Set month/ day/year, by pressing the up and down arrows ▲▼.
3. Set hour: minute, by pressing the up and down arrows ▲▼.
4. Within this menu option, you can change the time displayed by your thermostat to 24 Hour time (Military Time).
5. If your area observes daylight savings time, select D.S.T. to ON.
6. Date and Time are now set. You can return to the Main Menu by pressing the BACK to return to the previous menu.



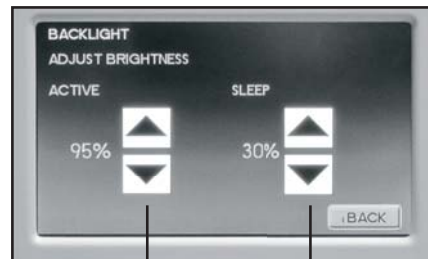
Security Lockout

This thermostat has the option to set security features to lockout everything but the adjustment of the temperature.

1. From the home screen, press Menu, then press Settings.
2. Select Security, press ON.
3. Enter Pin Number screen.
4. Select a pin number to lock out the thermostat. Once you've entered the 4-digit pin number, press the OK button to save the pin.
5. In the event pin number is lost default is 9999

Backlight

Press the up and down arrows ▲▼ to adjust desired backlight brightness when the thermostat is in active display or in the sleep display mode. (Default setting is 55% ACTIVE, 10% SLEEP)



Range 30-100% Range 1-100%

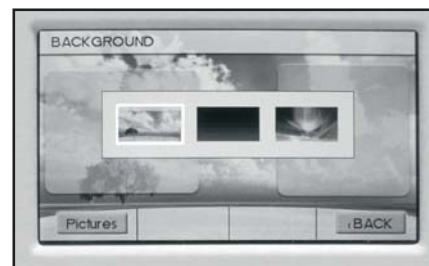
Sound

Adjust the desired sound level of screen buttons when pressed and the desired sound, either beep, one click, or two clicks.



Background

Select the desired background. This will only change the home screen background. The Pictures icon button allows loading or replacing personal photos to the MasterStat, once they have been formatted, using the photo converter software. This software and instructions are available online at www.auroracontrols.com. Once the photos have been converted to the correct format and uploaded to the MasterStat they will run as a slide show after 5 minutes of inactivity (no screen touches).



Vacation

From the MENU, press the Vacation button to set vacation starting date, time, and desired temperature, return date, time. To cancel this setting, press the CANCEL button. Press the OK to return to the previous menu.



On Peak (If Installed)

The 'On Peak' input is designed to allow utilities to utilize simple radio controlled switches to control the On Electric Peak behavior of the Geothermal Heat Pump by changing the thermostat heating and cooling set points.



USB

This screen allows you to import or export the User setting or Program. Mini USB Adaptor and Flash Drive required.



Energy Monitor (If installed)

If your heat pump has energy monitoring installed, the energy consumed can be viewed by pressing the Energy button. There are three choices to view the energy consumed: Instant, Daily, and Monthly.

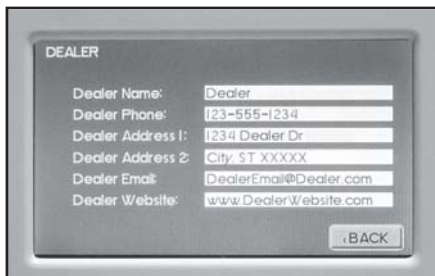


SuperBoost (Variable Speed Heat Pumps Only)

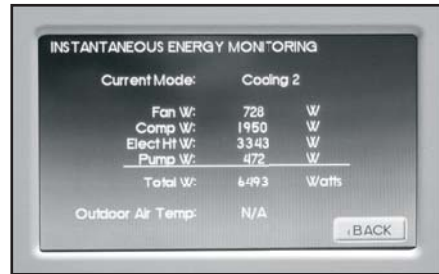
SuperBoost can be found by pressing menu/settings on the thermostat. The SuperBoost option temporarily enables a larger cooling capacity range. Normal cooling mode is limited to compressor speeds 1-9 and SuperBoost allows compressor speeds 10-12 if needed. This screen will allow the homeowner to turn on or off the SuperBoost option. The SuperBoost option will be enabled, by default, for a 24-hour period of time and then will automatically be disabled. **NOTE: Continuous use of the SuperBoost could result in overheating the ground loop.**

Dealer

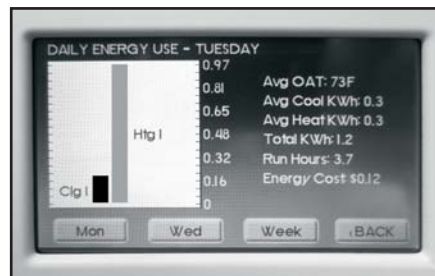
The installing dealer's contact information can be displayed on this screen. From the main screen, press Menu and then press Dealer. The dealer will enter this information during system installation.



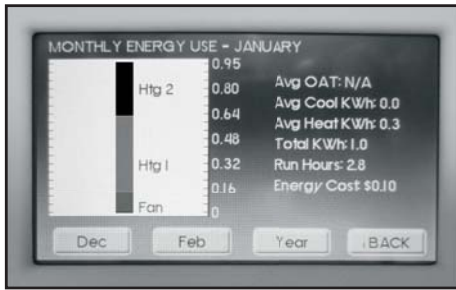
Instantaneous Energy Use screen



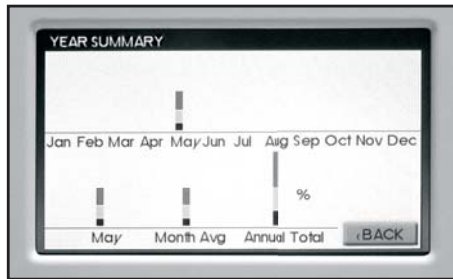
Daily Energy Use screen



Monthly Energy Use screen



Yearly Summary screen



Energy Monitoring (If Installed)

To enter your electric utility rate, select KWH cost. The cost can be set from \$0.01 to \$2.00. The default cost is \$0.10. The total energy cost for the system will be displayed on the daily and monthly summary screens

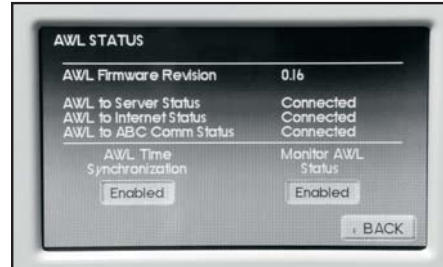


AWL Status (If Installed)

This screen displays the AWL firmware revision and provides the current AWL communication status relating to an Aurora WebLink (AWL) device. This screen is available whether an AWL is installed on the system or not.

AWL Time Synchronization - When enabled the AWL will synchronize the thermostat's date and time with internet time servers. This option by default is disabled. **NOTE: setting the proper time zone in the Symphony Portal is necessary for correct operation.**

Monitor AWL Status - When enabled, the thermostat will monitor the AWL's RS485, INTERNET, and SERVER status. The thermostat will display "AWL Comm Err" when the AWL is not communicating properly with the Aurora Modbus Network, "AWL Internet Err" when the AWL is unable to communicate to the symphony Servers. This option by default is disabled.



CAUTION: To clean the thermostat display, lightly dampen a clean non-abrasive cloth with water or any non-abrasive household cleaner. To clean, gently wipe the surface of the thermostat.
NOTE: Do not spray liquids directly on the thermostat.

ZoneStat User Information



IntelliZone2 ZoneStat

Backlight – Backlighting is activated whenever a key is pressed and remains on for 5 seconds.

Mode Button – Allows selection of modes: Off, Auto, Heat and Cool. Pressing the mode button moves selection between the available modes for the zone.

Fan Button - Pressing the FAN button will toggle the fan mode from auto mode, which runs the fan when a call for heat or cool occurs, continuous mode, or intermittent fan mode. Continuous Fan runs the fan continuously in the zone. Intermittent fan mode allows selection of fan on and off time in the zone.

Pressing the RIGHT and LEFT ARROW buttons toggles between adjustment of the fan on and fan off times in intermittent fan mode. In fan on (LEFT ARROW buttons) time adjustment, “on” will be displayed in the smaller 7-segment area to the right of the SET icon. In fan off time (RIGHT ARROW buttons) adjustment, “off” will be displayed in the smaller 7-segment area. Pressing the UP ARROW or DOWN ARROW buttons in intermittent mode shall adjust the on and off fan times by 5 minutes at a time. The fan mode may be adjusted for each zone at the MasterStat as well.

If in programmable mode, adjusting the fan mode or interval from the current schedule settings will cause the control to enter a “hold”.

Set Point Display - The set point that can be adjusted with the up or down buttons is located in the larger segments under the SET TEMP segment. In AUTO mode, the Set point screen will display two set points for HEAT and COOL. The set point that can be adjusted is displayed on the left in larger digits and the other set point is displayed on the right side in smaller digits. To switch between the two set points, press the right arrow button.

Auto Mode Display - When Heating mode is active the HEAT icon and the triangle next to the HEAT icon are flashing. When Cooling mode is active the COOL icon and the triangle next to the COOL icon are flashing.

Heat Mode Display - When Heating mode is active the triangle next to the HEAT icon is flashing. The HOLD icon is energized if a temperature override or a fan override is active. A temperature override is set if the set point is adjusted from the schedule set point in programmable mode. A fan override is set if the fan setting is adjusted from the schedule setting in programmable mode. When Emergency Heat or Auxiliary Heat are active, the triangle next to the HEAT icon is flashed ON and OFF.

Cool Mode Display - When Cooling mode is active the triangle next to the COOL icon is flashing. The HOLD icon is energized if a temperature override or a fan override is active. A temperature override is set if the set point is adjusted from the schedule set point in programmable mode. A fan override is set if the fan setting is adjusted from the schedule setting in programmable mode.

NOTE: Zone ID can be confirmed on the ZoneStat by pressing the cancel button for 5 seconds.

NOTE: There is no time adjustment on the ZoneStat. The time displayed is from the MasterStat setting.

IntelliZone2 SensorStat User Information



IntelliZone2 SensorStat

The SensorStat is just a temperature sensor and does not have any adjustment capability. Adjustments of zones with SensorStat's will need to be made at the MasterStat. Click in the upper right hand corner of the MasterStat to access the zone with the SensorStat to make adjustments.

