

MultiSITE CRC1 Series Controllers USER INTERFACE GUIDE



PREMTBVC0 – MultiSITE CRC1
PREMTBVC1 – MultiSITE CRC1+

PROPRIETARY DATA NOTICE

This document, as well as all reports, illustrations, data, information, and other materials are the property of LG Electronics U.S.A., Inc., and are disclosed by LG Electronics U.S.A., Inc., only in confidence.



Do not throw away, destroy, or lose this manual.

Please read carefully and store in a safe place for future reference.
Content familiarity required for proper installation and operation.

The instructions included in this manual must be followed to prevent product malfunction, property damage, injury, or death to the user or other people. Incorrect operation due to ignoring any instructions will cause harm or damage. A summary of safety precautions begins on page 4.

For more technical materials such as submittals, engineering databooks, and catalogs, visit www.lghvac.com.

UM_CRC1_Series_Controllers_12_20

For continual product development, LG Electronics U.S.A., Inc., reserves the right to change specifications without notice.

©LG Electronics U.S.A., Inc.

This document, as well as all reports, illustrations, data, information, and other materials are the property of LG Electronics U.S.A., Inc.





TABLE OF CONTENTS

Safety Instructions	5
Introduction.....	7
MultiSITE CRC1 Series Controllers	7
Compatible Equipment.....	7
Accessories.....	7
Safety	7
Controller Overview	8
Home Screen	8
Operation Mode	9
Adjusting Setpoints in Auto Mode	10
Setpoint Adjustment	11
Using the Controller Configuration Screens.....	12
Configuration Screens	13
Schedule Screen.....	13
More Screens.....	15
Configuration Screens	17
Installer Configuration Screens.....	17
Configuration Main Screens.....	18
ZigBee Wireless System.....	19
Building Manager Screens.....	20
Display/Date and Time Settings.....	21
Customize Home View.....	22
Filter Functions	23
Setpoints Configuration	24
SmartThinQ	25
Override Setup.....	26
Setback Setup	27
Outdoor Unit Control.....	28
Installer	29
General Settings	30
Temperature Settings.....	33
Fan Settings.....	34
Heat Settings	36
Emergency Heater Settings.....	38
Accessories	39
BMS Configuration.....	42
BACnet Settings	42
ZigBee Configuration	44
Basic Diagnostic	47
Password Setup.....	50
Factory Default.....	51
Relative Humidity Display	52
Time and Date.....	52
PIR (Motion Sensor)	53
BACnet Points	54
Controller BACnet Points	54



SAFETYINSTRUCTIONS

The instructions below must be followed to prevent product malfunction, property damage, injury or death to the user or other people. Incorrect operation due to ignoring any instructions will cause harm or damage. The level of seriousness is classified by the symbols below.





TABLE OF SYMBOLS


 DANGER	<i>This symbol indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.</i>
 WARNING	<i>This symbol indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.</i>
 CAUTION	<i>This symbol indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.</i>
Note:	<i>This symbol indicates situations that may result in equipment or property damage accidents only.</i>
	<i>This symbol indicates an action that should not be performed.</i>

DANGER

-  **Do not touch any exposed wiring, terminals, or other electrical components with tools or exposed skin. Only qualified technicians should install, use or remove this unit.**
Improper installation or use may result in fire, explosion, electric shock, physical injury and/or death.
-  **Don't use or store flammable gas or combustibles near an outdoor or indoor unit.**
There is risk of fire, explosion, and physical injury or death.

WARNING

- The information in this manual is intended for use by a trained technician familiar with the U.S. National Electric Code (NEC) who is equipped with the proper tools and test instruments.**
Failure to carefully read and follow all instructions in this manual may result in equipment malfunction, property damage, personal injury and/or death.
-  **Risk of electric shock. Disconnect all power before servicing.**
 -  **Do not install the MultiSITE Controller unit if it will be exposed to rain or other precipitation.**
 -  **Do not install the unit in a location exposed to open flame or extreme heat.**
 -  **Do not touch the unit with wet hands.**
There is risk of fire, electric shock, physical injury and/or death.
- Replace all control box and panel covers.**
If cover panels are not installed securely, dust, water and animals may enter the unit, causing fire, electric shock, and physical injury or death.
- Wear protective gloves when handling equipment.**
Sharp edges may cause personal injury.

- Dispose of any packing materials safely.**
- Packing materials, such as nails and other metal or wooden parts may cause puncture wounds or other injuries.**
 - Tear apart and throw away plastic packaging bags so that children may not play with them and risk suffocation and death.**
-  **Do not change the settings of the protection devices.**
If the pressure switch, thermal switch, or other protection device is shorted and forced to operate improperly, or parts other than those specified by LG are used, there is risk of fire, electric shock, explosion, and physical injury or death.
- If the air conditioner is installed in a small space, take measures to prevent the refrigerant concentration from exceeding safety limits in the event of a refrigerant leak.**
Consult the latest edition of ASHRAE (American Society of Heating, Refrigerating, and Air Conditioning Engineers) Standard 15. If the refrigerant leaks and safety limits are exceeded, it could result in personal injuries or death from oxygen depletion.

SAFETY INSTRUCTIONS

MultiSITE Controller is for use with select LG commercial air conditioning systems only.

⊘ Do not attempt to use MultiSITE Controller with any other type of system. Refer to the compatible equipment list in this manual.

There is risk of equipment damage or degraded performance

⊘ Do not cut, lengthen or shorten the cable between the MultiSITE Controller unit and the indoor unit.

⊘ Do not install the MultiSITE Controller unit in a location where the cable cannot be safely and easily connected between the two units.

⊘ Do not allow strain on this cable.

There is risk of equipment damage.

Clean up the site after all procedures are finished, and check that no metal scraps, screws, or bits of wiring have been left inside or surrounding the controller or indoor units.

Provide power to the outdoor unit compressor crankcase heaters at least six (6) hours before operation begins.

Starting operation with a cold compressor sump(s) may result in severe bearing damage to the compressor(s). Keep the power switch on during the operational season.

⊘ Do not block the indoor unit inlet or outlet.
Unit may malfunction.

Securely attach the electrical cover to the indoor unit. Non-secured covers can result in fire due to dust or water in the service panel.

⊘ Do not allow water, dirt, or animals to enter the unit.
There is risk of unit failure or degraded performance.

⊘ Do not spill water or other liquid on the inside of the indoor unit, especially on electrical components.

⊘ Do not drop the MultiSITE Controller unit into water. If the unit is immersed in water or other liquid, contact your local authorized LG distributor for support.

There is risk of unit failure or degraded performance.

MultiSITE CRC1 Series Controllers

This manual describes how to use the LG MultiSITE Commercial Remote Controllers (CRC) 1. There are two models of this controller:

- MultiSITE CRC1 (Model PREMTBVC0)
- MultiSITE CRC1+ (Model PREMTBVC1)

The two models are identical with the exception of two functions included in the MultiSITE CRC1+ only:

- Motion sensor
- Humidity sensor

Compatible Equipment

MultiSITE CRC1 Controllers are compatible with LG Commercial Air Conditioning indoor units (except PTAC units).

⚠ Do not attempt to use a MultiSITE CRC1 controller with any other equipment.

Accessories

These accessories are available for MultiSITE CRC1 controllers:

- | | |
|------------------------------------|-----------------|
| • ZigBee® Pro wireless card | Model ZVRCZPWC1 |
| • Door and window switch | Model ZVRCZDWS1 |
| • Wall mounted occupancy sensor | Model ZVRCZWOC1 |
| • Ceiling mounted occupancy sensor | Model ZVRCZCOC1 |

The ZigBee® Pro wireless card is required for communication between the controller and the other accessories.

Safety

Safety of personnel is the primary concern during all procedures. Read and understand the safety summary at the front of this manual. Ensure the controller is installed in accordance with the appropriate LG installation manual.

⚠ WARNING

If troubleshooting is required, it must be performed by trained personnel and in accordance with national wiring standards and all local or other applicable codes. Improper troubleshooting and repair/replacement of equipment can result in fire, electric shock, physical injury, or death.

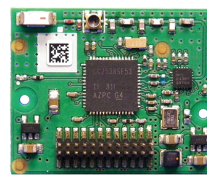
Note:

Improper troubleshooting and repair/replacement of equipment can result in damaged equipment or degraded operation.

Typical MultiSITE CRC1 Controller



MultiSITE CRC1 Controller Accessories



ZigBee® Pro Wireless Card



Door/Window Switch



Wall Mounted
Occupancy Sensor



Ceiling Mounted
Occupancy Sensor

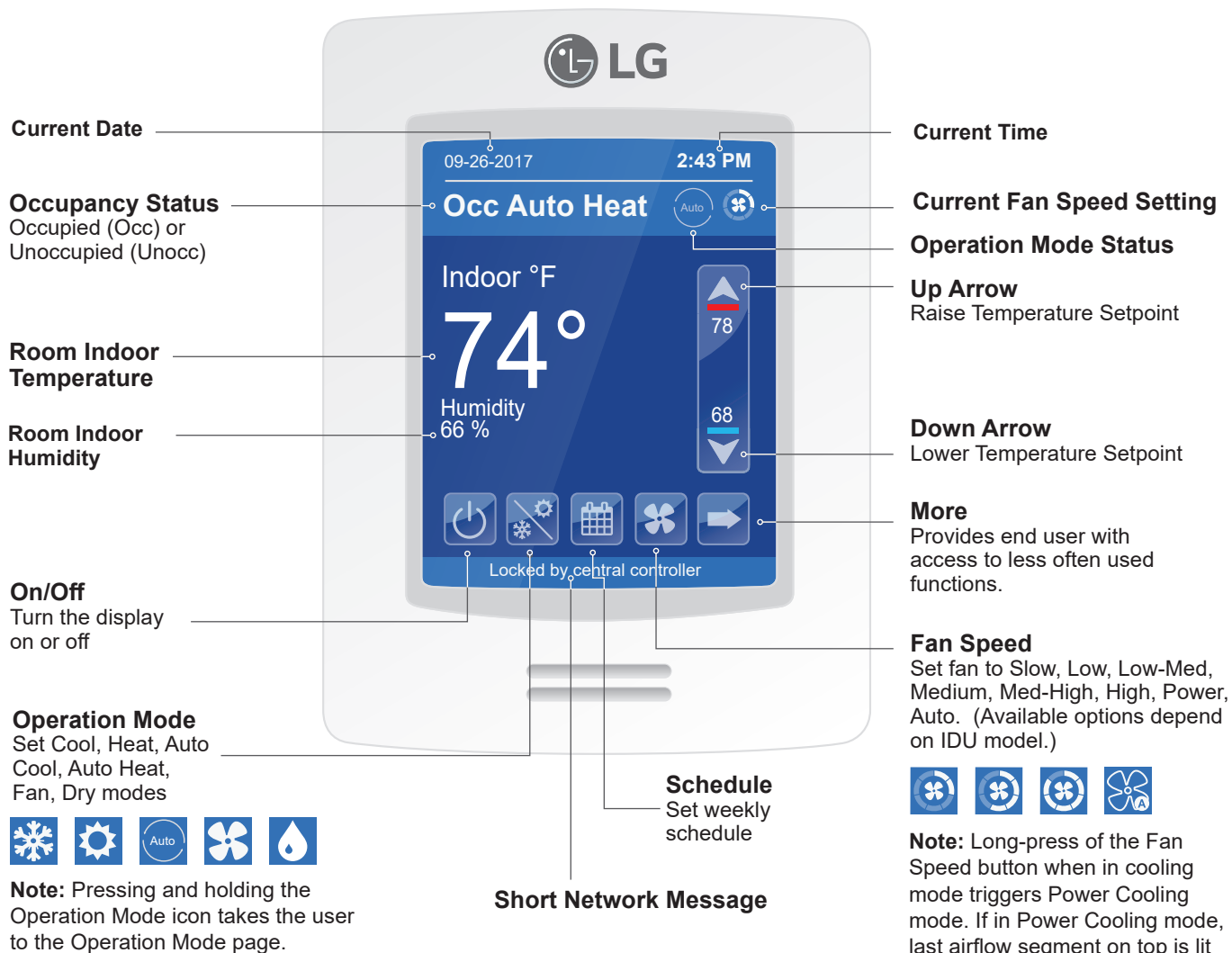
*ZigBee is a registered trademark of the ZigBee Alliance.



CONTROLLER OVERVIEW

Home Screen

The controller home screen is shown and described below.



Note:

Available functions/features may differ based on the connected system.

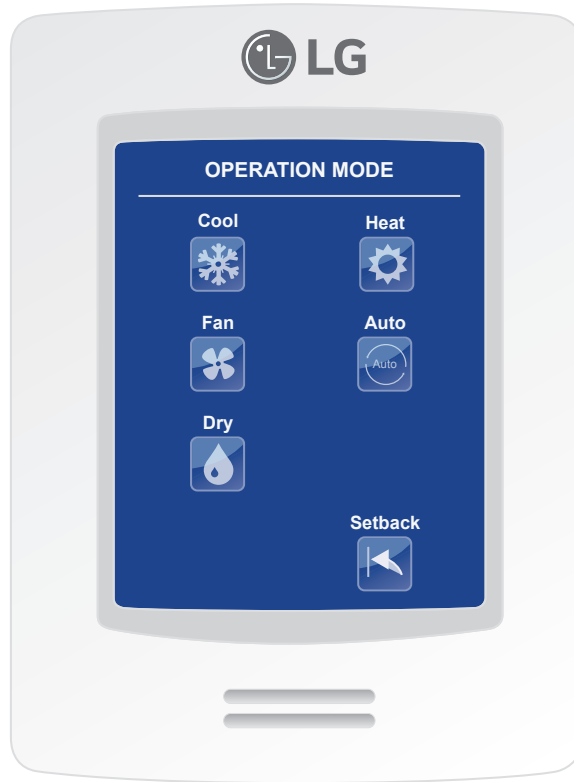
When any change is made to a parameter, the value is automatically saved in memory when the next parameter is selected or another page is opened.

Arrows auto-increment/decrement at higher speed when holding button for more than 2.5 seconds.

Note: Long-press of the Fan Speed button when in cooling mode triggers Power Cooling mode. If in Power Cooling mode, last airflow segment on top is lit in purple and the text changes from "Fan" to "Power Cool". This mode lasts for 30 minutes and then reverts back to the previous fan speed.

Operation Mode

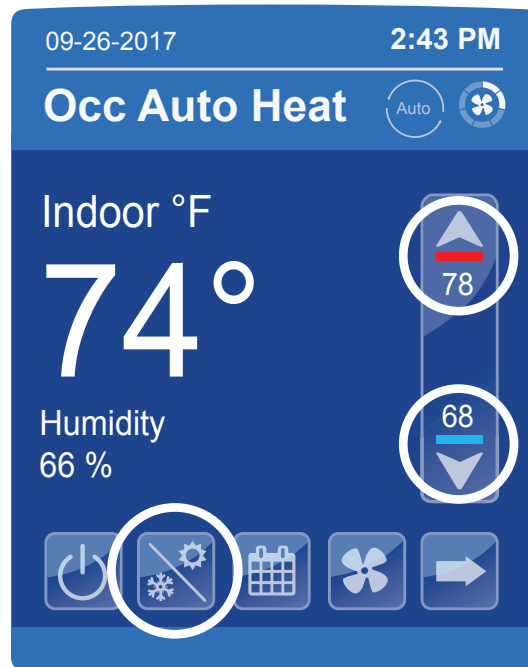
Selecting modes available on this screen places the IDU in that mode and then the user will be returned to the home screen. Selecting the mode that is currently highlighted will maintain the current mode and return the user to the home screen.



CONTROLLER OVERVIEW

Adjusting Setpoints in Auto Mode

Setpoints can be modified in three different ways when in Auto Mode: Cooling Setpoint change, Heating Setpoint change, or Cooling/Heating Setpoint change.



Auto Mode, Cooling Cycle, Cooling Setpoint (Dual Setpoint setting)

When in cooling cycle of Auto Mode, use the up and down arrows to raise or lower the cooling setpoint. When the setpoint is modified it will increase or decrease the difference between the cooling and heating setpoint values. The minimum difference allowed between cooling and heating setpoints is determined by the Deadband control value setting (found in the Setpoint Config screen). "Cooling Setpoint" shows as indicated on the screen to the left.

Auto Mode, Cooling Cycle, Heating Setpoint (Dual Setpoint setting)

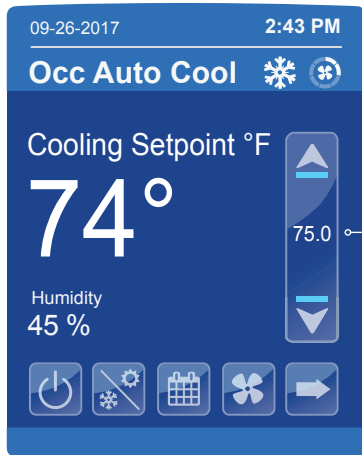
To change the heating setpoint when in Auto Mode, cooling cycle, tap the up or down arrows to place the controller into set point configuration mode and then immediately tap the Mode button once to change to heating set point mode. "Heating Setpoint" shows when this parameter is set. Immediately move back to the set point up or down arrows to change the heating set point.

Auto Mode, Cooling Cycle, Cooling/Heating Setpoint (Dual Setpoint setting)

To change the cooling and heating setpoints simultaneously, a third option is available for adjusting setpoints. If in Auto Mode (either cooling or heating cycle), tap either the up or down set point buttons, then immediately tap the Mode button until "Cool/Heat" shows, indicating that the controller is in the correct set point mode. Immediately move back to the up or down set point buttons to change the set points as desired.

Setpoint Adjustment

Setpoints can be modified in three different ways when in Auto Mode; Cooling Setpoint change, Heating Setpoint change or Cooling/Heating Setpoint change.

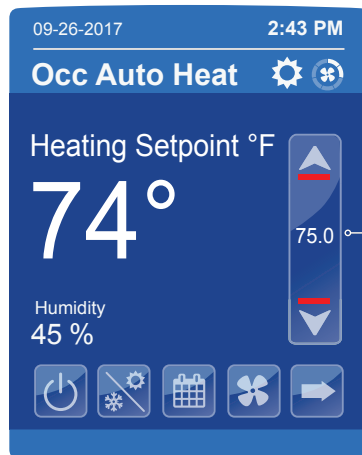


Cooling mode or cooling only sequence of operation

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 display the occupied cooling setpoint while it is adjusted.

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

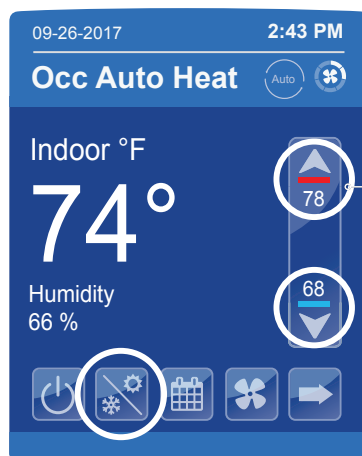


Heating mode or heating only sequence of operation

In Heating mode, the setpoint displayed in the bar is the current occupied heating setpoint.

During occupied setpoint adjustment, the large digits are temporarily used to display the occupied heating setpoint.

Normal temperature display resumes after the setpoint is adjusted and the actual occupied heating setpoint is displayed in the setpoint bar.



Automatic Heating / Cooling mode

In automatic mode, the setpoint displayed at the top of the set point bar represents the actual occupied cooling setpoint.

During occupied setpoints adjustment, the 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).

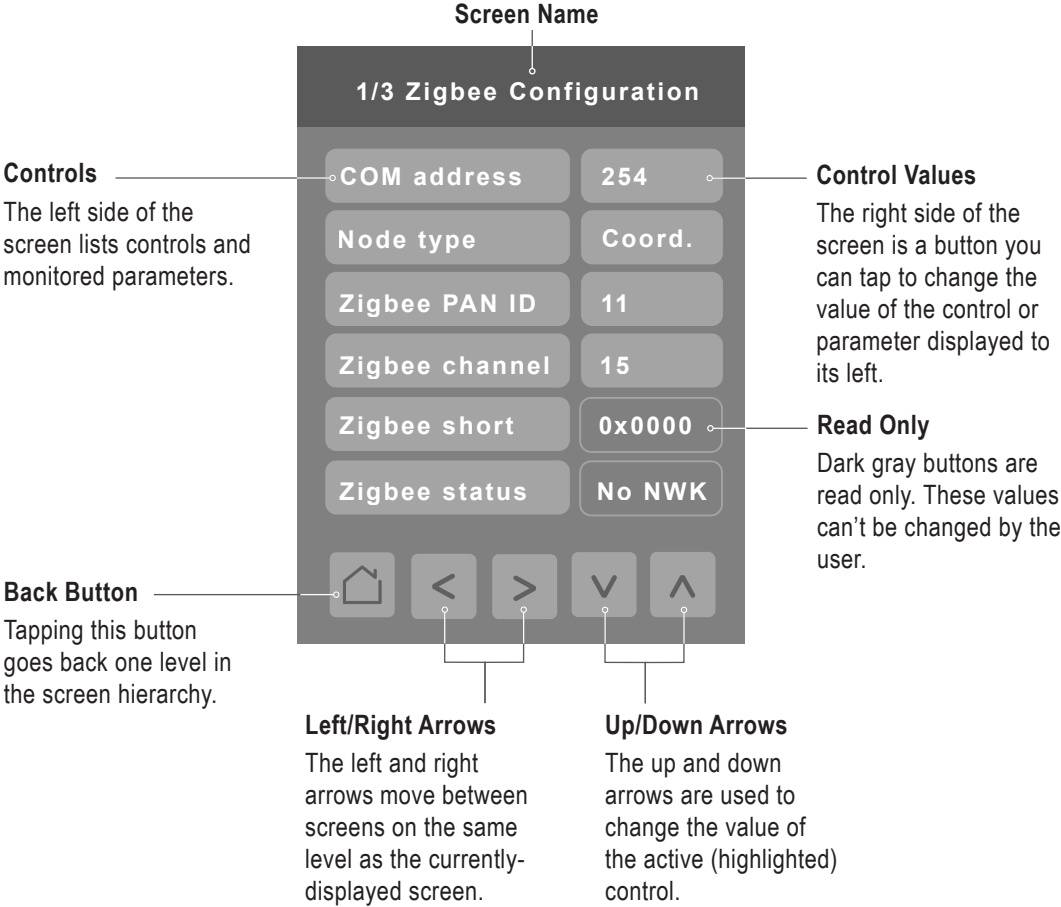
Normal temperature display resumes after the setpoints are adjusted and the actual occupied heating and cooling setpoints are displayed in the setpoint bar.

CONTROLLER OVERVIEW

Using the Controller Configuration Screens

Some of the buttons on the Home screen display configuration screens. Controller operating parameters can be set as necessary for your system. The figure below describes how to use the configuration screens.

Multisite CRC 1 Controller

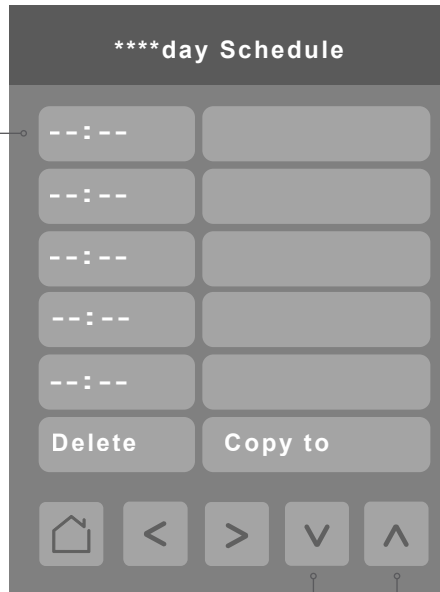


Schedule Screen



Press the Schedule button on the Home screen to display the Schedule Screen. There are different schedule setting screens, one for each day of the week (7 days) titled accordingly. Each can have different scheduled events where the room controller is set for set point, system mode, fan speed and occupancy status. Five (5) separate events can be configured per day.

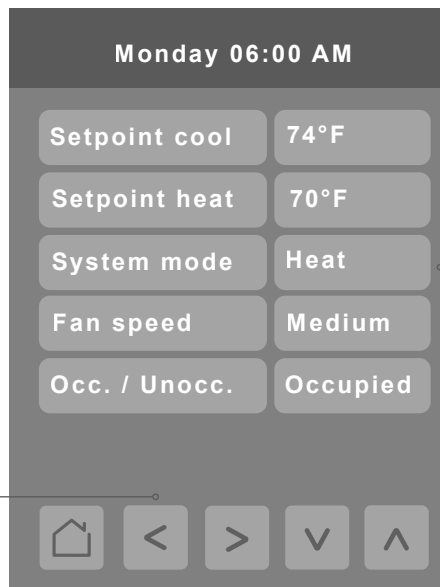
Tap the left-hand button to set the time for scheduled event. When the time for a new event is configured, the default system mode of "Off" will appear in the event overview portion of the control on the right side.



Tap the right-hand side button to enter the next screen.

Adjust the time in the left column by pressing on the Up and Down arrows. To configure the System mode for the time selected tap on the right column.

This typical schedule screen shows the parameters that can be adjusted for a specific time and day in a week.



Once the event has been fully configured, press the left arrow to be returned to the daily schedule overview screen.

Up to 5 separate events per day can be configured. User can set cooling and heating set points, system mode (Off, Dry, Cool, Heat, Fan and Auto), fan speed and Occupied/Unoccupied status.

CONFIGURATION SCREENS

Daily Schedule Screens – continued

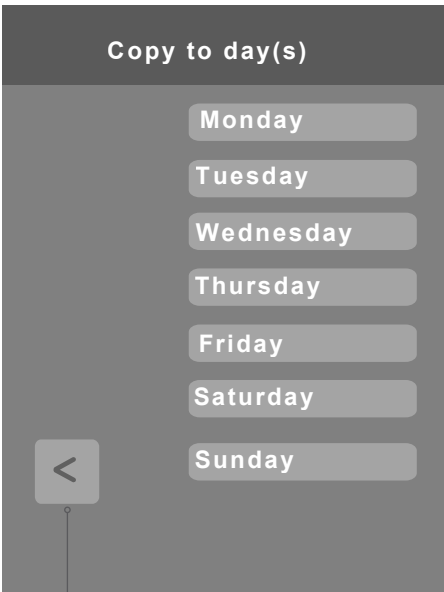
MultisITE CRC 1 Controller



To modify an existing event, tap either the left side control to edit the time or tap the right-hand side of the control to re-enter the event screen and make your desired changes.

If desired, use the 'Copy to' button to copy the schedule to another day of the week. First choose the time of the event you want to copy and then choose 'Copy to'.

To delete an event, tap the time of the event and then tap the Delete button.



Choose the day(s) you want to copy the event to and then press the left arrow.

Event Overview Display	Parameter Meaning
First Letter	Mode (O=off, C=cool, H=heat, F=fan, A=auto, D=dry)
Second Number(s)	Set Point(s)
Third Letter	Occupancy Status (U=unoccupied, O=Occupied)
Current Example: H: 74 / 70: O = Heating Mode, Upper setpoint of 74, Lower setpoint of 70, Occupied	

Parameter	Parameter Settings	Definition
Setpoint cool	Range: 50-99 °F Default value: 78°F	Range of cooling setpoint values
Setpoint heat	Range: 40-90 °F Default value: 68°F	Range of heating setpoint values
System mode	Choices: Off, Cool, Heat, Fan, Auto, Dry Default value: OFF	System modes
Fan Speed	Choices: Slow, Low, Low-Med, Medium, Med-High, High, Power, Auto Default value: Low	Fan speed settings
Occ./Unocc.	Choice: Unoccupied, Occupied Default value: Unoccupied	Selection of unoccupied or occupied for the conditioned space

CONFIGURATION SCREENS

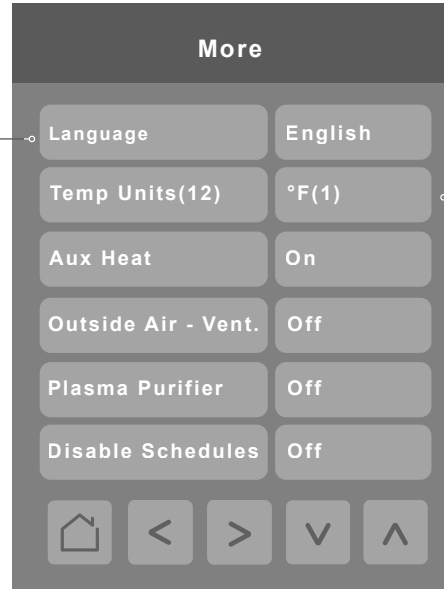
More Screens



Press the More button on the Home screen to display the More screen.

Language

Use the up and down arrows to select English, French, or Spanish



Temp Units

Allows you to switch between Celsius and Fahrenheit

Parameter	Parameter Values	Definition
Language	English, French, Spanish Default value: English	Selects the language for the controller display
Temp Units - °F/°C (12)	0 = "°C (0)", 1 = "°F (1)" Default value: °F	Selects Celcius degrees or Fahrenheit degrees
Aux Heat	0 = "Off", 1 = "On" Default value: Off	Controls the auxiliary heater when Aux Heat Cntrl (21) is enabled
Outside Air - Vent.	0 = "Off", 1 = "On" Default value: Off	Controls the outside air ventilation when Out_Air_Vent(24) is enabled
Plasma Purifier	0 = "Off", 1 = "On" Default value: Off	Controls the plasma purifier when Plasma Kit (20) is enabled
Disable Schedules	0 = "Off", 1 = "On" Default value: Off	Allows all existing loccal schedules to be disabled without having to remove them. This option is available only if a schedule has been set on the remote controller.

CONFIGURATION SCREENS

More Screens – continued

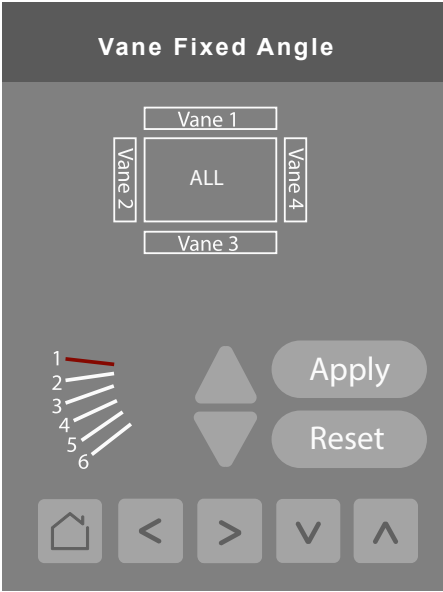
Press the right arrow button to display these screens. To adjust vane angle, user selects vane(s) by tapping vane icon at the top of the screen, adjusts vane angle by using up/down arrows and then selects Apply button.

Note:

Vane fixed angle control for 4 vane, 2 control type IDUs occurs in pairs. Refer to the Vane Fixed Angle screen. If a 4-louver device is identified, when the user chooses Vane 1 or Vane 3 control, the opposite vane (Vane 3 or Vane 1) will be controlled at the same time. If Vane 2 or Vane 4 is selected, Vane 4 or Vane 2 will be controlled in lockstep with its matching pair as well. The same control behavior holds for a 2-louver device. Vane fixed angle control for 4 vane, 4 control type IDUs does not occur in pairs and can be set independently for each vane. In both cases, selecting ALL on the graphic will cause all vanes to be set to the same angle.

Multisite CRC 1 Controller

Airflow Up / Down and Airflow Left / Right controls can both be “On” at the same time. However, when Airflow Circular control is “On,” both of the other two controls will be set to “Off.”



Parameter	Parameter Settings	Definition
Airflow Up / Down	Choices: 0 = “Off”, 1 = “On” Default value: Off	Selects the vane direction of the airflow, up and down
Airflow Left / Right	Choices: 0 = “Off”, 1 = “On” Default value: Off	Selects the vane direction of the airflow, left and right
Airflow Circular	Choices: 0 = “Off”, 1 = “On” Default value: Off	For 4-way cassette IDUs only. Selects circular vane direction.
Airflow Smart	Choices: 0 = “Off”, 1 = “On” Default value: Off	For 4-way cassette IDUs only. Selects Smart airflow vane direction.
Airflow Refresh	Choices: 0 = “Off”, 1 = “On” Default value: Off	For 4-way cassette IDUs only. Selects refresh airflow vane direction.
Apply		Sends the vane angle selected with the up and down arrow keys to the IDU
Reset		Sets all vane angles to the default position of “3”

CONFIGURATION SCREENS

Installer Configuration Screens

These screens are more commonly used during installation, system configuration, or troubleshooting than by an end user. There is no icon on the Home screen to access these configuration screens. You must press and hold the area of the screen indicated on the diagram below to access the first screen.

If a configuration / installer password is activated to prevent unauthorized access to the configuration menu parameters, a password entry prompt will appear to prevent access to the device configuration components.



CONFIGURATION SCREENS

Configuration Main Screens

There are two main configuration screens as shown below. Press the left and right arrow buttons to move between these two screens. Press a button on a screen to display the parameter selections for that item.

MultiSITE CRC 1 Controller

Configuration 1/2

Building Manager

Installer

BMS Config

Basic Diagnostic

Password Setup

Factory Default

Home

<

>

✓

^

Enter Display, Date & Time, Filter, Setpoints, Override, Setback and Outdoor Unit configuration

Enter General, Temperature, Fan and Heat settings and Accessories configuration

Enter BACnet settings

View Diagnostic parameters

Setup a password to restrict/allow access to the thermostat

Reverts all controller control settings back to default values.

Note: Users will be given the option to confirm that they wish to proceed. Once in the Factory Default screen, if user proceeds with this step, all schedules and current controller settings including time and date will be cleared. Settings cannot be recovered after a Factory Default has been performed.

Configuration 2/2

Wireless Ecosystem

Home

<

>

✓

^

Enter ZigBee wireless zone configuration settings.

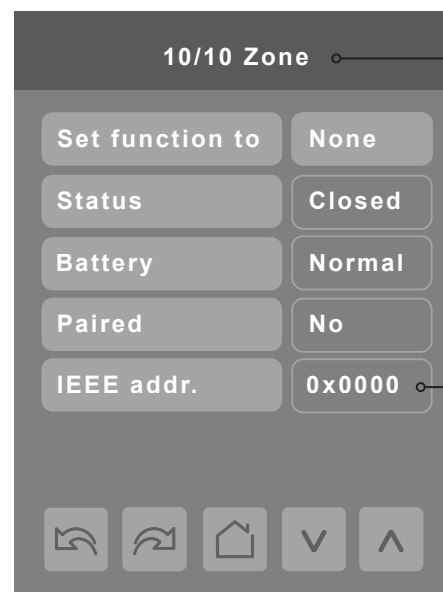
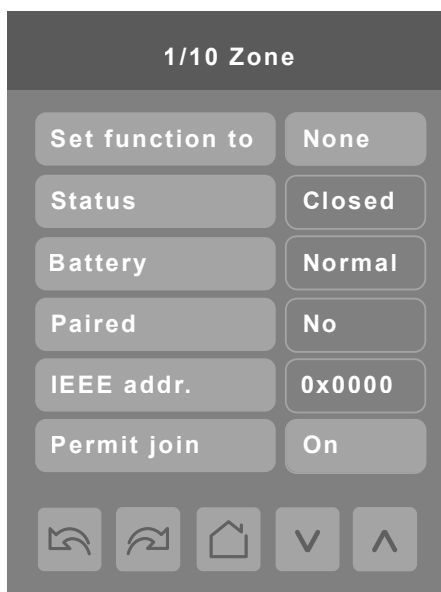
CONFIGURATION SCREENS

ZigBee Wireless System

When ZigBee wireless sensors are set up to communicate with the controller, the functioning of each such sensor is described in a separate Zone screen, up to a maximum of 10 Zones. Press the left and right arrow keys to move between Zone screens. Select the appropriate type of sensor using the up and down arrow keys.



Enter ZigBee wireless Zone configuration settings.



Up to 10 separate wireless sensors can be configured, each with its own Zone screen

Only last 4 digits in HEX shown

CONFIGURATION SCREENS

Building Manager Screens

There are two main configuration screens as shown below. Press the left and right arrow buttons to move between these two screens. Press a button on a screen to display the parameter selections for that item.

Customize Home View

Hide On/Off, Mode, Schedule, More, Set Temp, Space Temp, Fan and Humidity options on home screen.

Code Search

Use the Up and Down arrows to choose an available Function Code and select the Code Search button to navigate to the screen where that function code resides.

Codes can be found in brackets next to a parameter throughout all menus. This function is used for quicker menu navigation.

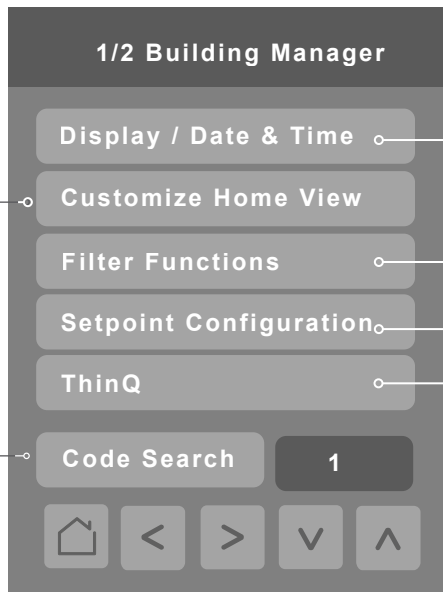
Override Setup

If controller is in the unoccupied mode then the controller enters Override mode when the user taps the screen the first time.

Select this control to configure settings for Override including set points, system mode, fan speed and duration of override.

Outdoor Unit Control

Manage outdoor unit functions through the Controller's interface.



Display Basic Settings – Date / Time, Display Color, Standby Brightness (and delay timing), Night Backlight level, Standby Screen).

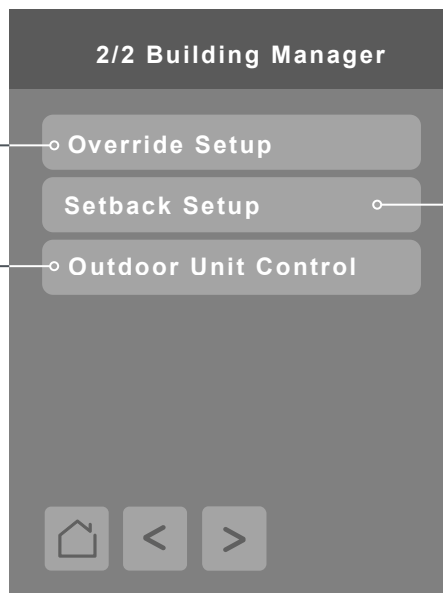
Filter Functions – Clear Filter Alarm, Remaining Time, Lower/Raise Grill, Robot Cleaning

Setpoint Configuration

Choose between Single/Dual set point(s) and configure set point max/min limits and deadband.

Note: Available functions/features may differ based on the connected system.

Smart ThinQ – Displays the Smart ThinQ screen. Allows pairing of the controller and the Smart ThinQ smartphone app. The Smart ThinQ app allows air conditioner control from the smartphone.



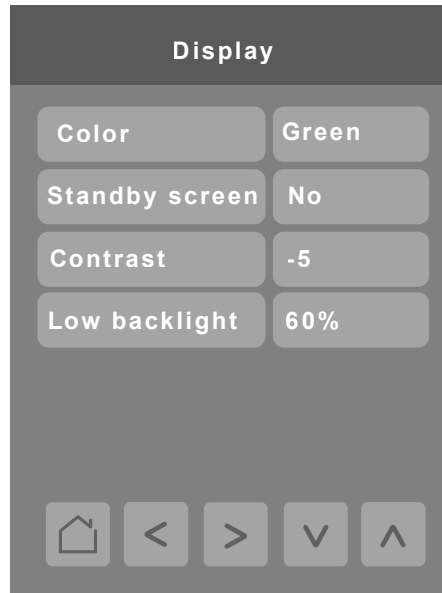
Setback Setup

Setback settings are configurable with this control including set points, system mode and fan speed.

Display/Date and Time Settings

Press the Display / Date & Time button on the Building Manager screen to show the Display menu screen.

Press the right arrow button on the Display menu screen to show the Date & Time screen.

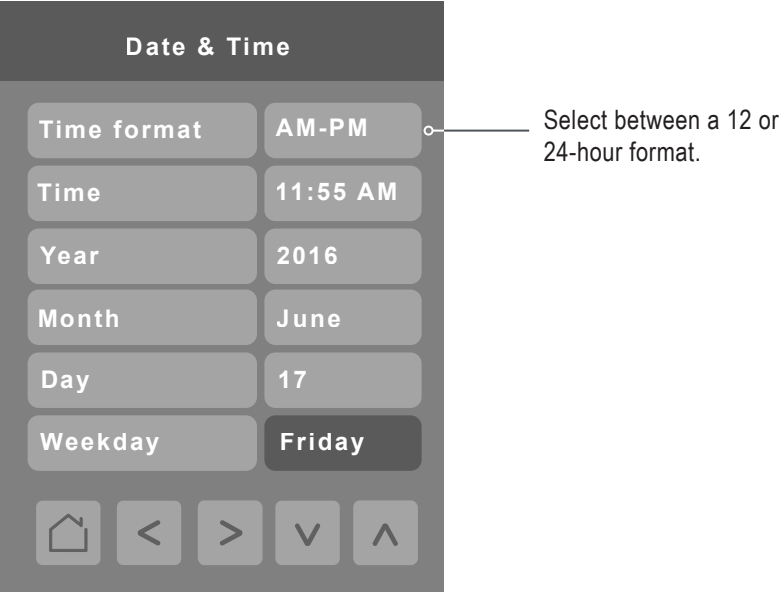


Parameter	Parameter Settings
Color	Choices: Blue, Green, Grey, Dark Grey, White Default value: White
Standby Screen	Choices: No, Yes, Occ Only, Screen Sav Default value: No
Contrast	Display Contrast Set contrast of display by using the up and down arrows. Adjustable: -5 to 5. Default value: -5
Low backlight	Backlight Display Set display backlight intensity after 2 minutes of keyboard inactivity. Adjustable: 0 to 100%. Default value: 60%

CONFIGURATION SCREENS

Display/Date and Time Settings – continued

Press the right arrow button on the Display screen to show the screen below. The Clock settings screen allows the device's internal time settings to be changed, including current time, standard day, month, year and weekday options, as well as the choice between a 12 hour AM / PM display or a 24 hour display. Using the Up and Down arrows adjust the Time, Year, Month and Day parameters. The Weekday is automatically filled by the system and it cannot be adjusted.



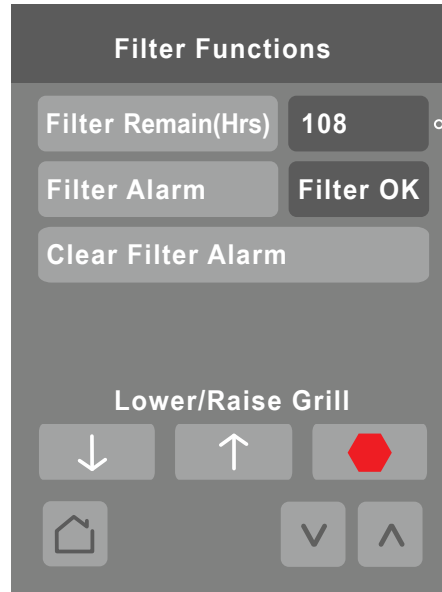
Customize Home View

Press the Customize Home View button on the Building Manager Screen to select the Hide Controls menu screen. The Hide Controls menu is used to select which parameters are displayed on the home screen of the thermostat. You can select which parameter to show or hide by tapping it and then using the Up and Down arrows. By default, all parameters are shown on the main screen.



Filter Functions

Press the Filter Functions button on the Building Manager screen to display the Filter Functions screen. The Filter Functions menu displays the time and alarm parameters. These cannot be adjusted by the user.



The time is measured in hours. Maximum value is 2400.

Parameters	Parameter Settings
Filter Remain (Hrs)	Range is: 2400 - 0 Default value = N/A
Filter Alarm	"Filter OK" "Service Filtr!" Default value = N/A

CONFIGURATION SCREENS

Setpoints Configuration

Press the Setpoint Config button on the Building Manager Screen to display the Setpoints Configuration screen. Press the Single/Dual button to select single or dual setpoint operation.

Note: If changes are made to Deadband and Setpoint Min/Max values after scheduled events have already been added to the Schedule Event table, the new rules will be enforced only when the user enters back into the Schedule Editor.

If setpoint max./min. values are not visible, this indicates that central control (CC) has issued a command for more restrictive values and that the CRC1 is now following CC. To re-enable these controls, CC limits must exceed values of remote controller.



Press up or down arrow keys below to select between Single or Dual set point modes.

Note: Available functions/features may differ based on the connected system.

Single Setpoint Mode



Dual Setpoint Mode



Minimum deadband value between the heating and cooling setpoints. Applied only when any of the setpoints are modified. Range is 1 °F - 10 °F

Parameters / Default Value	Parameter Settings
Single/Dual Default value: Dual SP(1) Default value can be changed by user	Single SP (Single Setpoint Adjustment) Setpoint Maximum is 86 °F Setpoint Minimum is 60 °F
	Dual SP (Dual Setpoints Adjustment) Maximum upper cooling temperature is 99 °F Minimum lower cooling temperature is 50 °F Maximum upper heating temperature is 90 °F Minimum lower heating temperature is 40 °F Deadband range is 1 °F - 10 °F

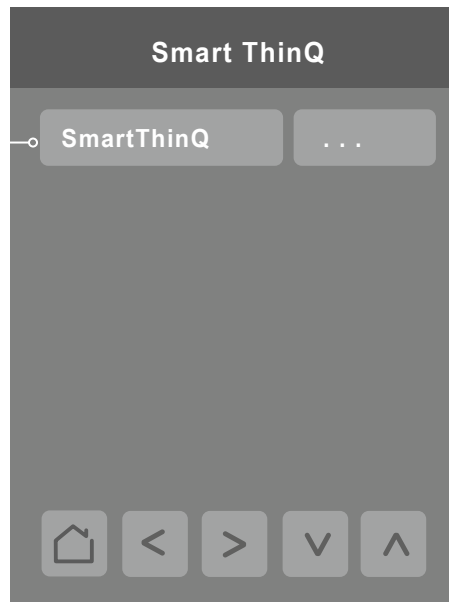
CONFIGURATION SCREENS

SmartThinQ

Press the SmartThinQ button on the Building Manager Screen to display the SmartThinQ Configuration screen.

SmartThinQ

Tap the "... " button to put the wifi module in pairing mode..The control will update momentarily to indicate the command was sent.



CONFIGURATION SCREENS

Override Setup

Press the Override Setup button on the Building Manager screen to display the Override Setup screen. The user can configure override settings including set points, system mode, fan speed and override duration.

Override Operation

Override mode can only be activated if the current system status is Unoccupied. If this condition is met, the controller will enter Override mode as soon as the user taps the screen the first time (from dim state). If the user makes any changes to the settings, those are accepted and the controller stays in Override mode. When the override timer expires, the controller returns to the original settings (Mode, Fan Speed, Set Points) in effect prior to entering Override. If a scheduled event starts during Override mode, the controller accepts the scheduled event and exits Override mode.



Parameter	Parameter Settings
Setpoint (Single Setpoint)	Range: Heating Mode: 60-86 °F Cooling Mode: 64-86 °F Auto Mode: 64-86 °F Default value: 72°F
Setpoint cool (Dual Setpoint)	Range: 50-99 °F Default value: 78°F
Setpoint heat (Dual Setpoint)	Range: 40-90 °F Default value: 68°F
System mode	Choices: Off, Cool, Heat, Fan, Auto, Dry Default value: Auto
Fan Speed	Choices: Low, Medium, High, Auto Default value: Medium
Override	Temporary occupancy override for controller Adjustable: 30 to 240 minutes Default value = 30 minutes

Default Parameters are dependent on if the controller is in Single Setpoint Mode or Dual Setpoint Mode.

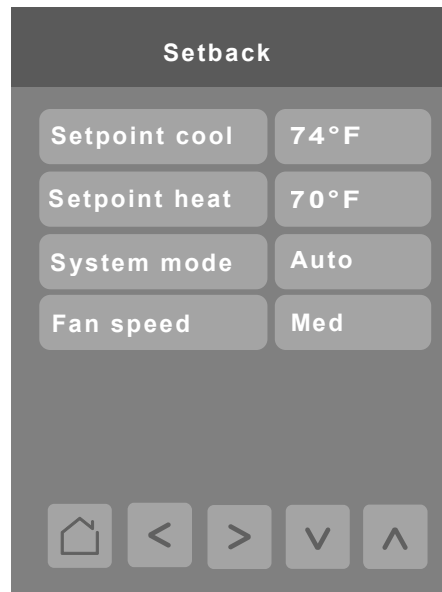
CONFIGURATION SCREENS

Setback Setup

Press the Setback Setup button on the Building Manager screen to display the Setback Setup screen. Setback parameters including set points, system mode, and fan speed are configured on this screen.

Setback Operation

If the controller is in Setback mode and the user changes the Mode, Fan Speed or Set Points, the controller exits Setback mode and keeps settings as applied by the user until the next scheduled event occurs. Setback mode can also be exited if the user presses the Setback mode button again from the Operation Mode screen while in Setback mode. The setback icon on the Operation Mode screen will indicate if that mode is active or not.



Parameter	Parameter Settings
Setpoint (Single Setpoint)	Range: Heating Mode: 60-86 °F Cooling Mode: 64-86 °F Default value: 72°F
Setpoint cool (Dual Setpoint)	Range: 52-99 °F Default value: 78°F
Setpoint heat (Dual Setpoint)	Range: 40-90 °F Default value: 68°F
System mode	Choices: Auto, Dry, Off, Cool, Heat, Fan Default value: Auto
Fan Speed	Choices: Low, Medium, High, Auto Default value: Medium

Default Parameters are dependent on if the controller is in Single Setpoint Mode or Dual Setpoint Mode.

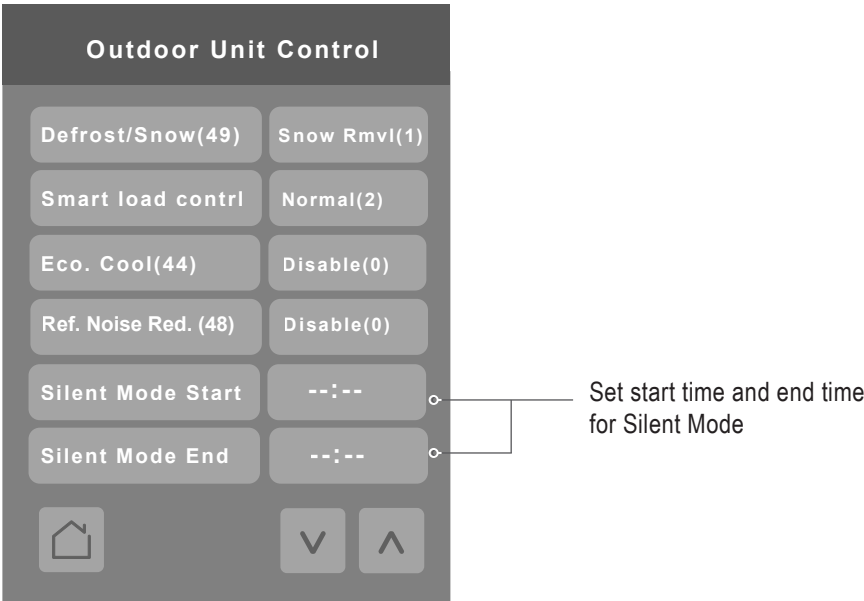
CONFIGURATION SCREENS

Outdoor Unit Control

Press the Outdoor Unit Control button on the Building Manager screen to display the Outdoor Unit Control screen. The Outdoor Unit Control lets you manage outdoor units through the controller interface.

NOTE:

For the first four controls to be visible, ODU Mode - M/S(47) control must be set to "Master(1)." For the Silent Mode Start/End controls to be usable, Silnt Mde Cntrl Loc control on Configuration/Installer General 4/4 screen must be set to "Remote(1)."



Parameter	Parameter Settings	Definition
Defrost/Snow(49)	0 = "Disable (0)" 1 = "Snow Rmvl (1)" 2 = "Fast Dfrst (2)" 3 = "Both (3)" Default value = Disable(0)	Enables the defrost function to remove snow from the outdoor unit
Smart load ctrl	0 = "Disable (0)" 1 = "Efficient (1)" 2 = "Normal (2)" 3 = "Power (3)" Default value = Disable(0)	Changes target/head suction pressure to maximize energy savings and minimize time to set point
Eco. Cool(44)	0 = "Disable (0)" 1 = "Low-Savings (1)" 2 = "Mid-Savings (2)" 3 = "Hi-Savings (3)" Default value = Disable(0)	
Ref. Noise Red.(48)	Choices: Disable(0), Mode 1 (1), Mode 2 (2) Default value = Disable(0)	Reduces the refrigerant noise during the initialization of the indoor unit in heating mode.
Silent Mode Start/End	Default value = "--:--"	Time of day in either AM/PM or 24 hr. format (depending on control setting in Display / Date & Time section)

CONFIGURATION SCREENS

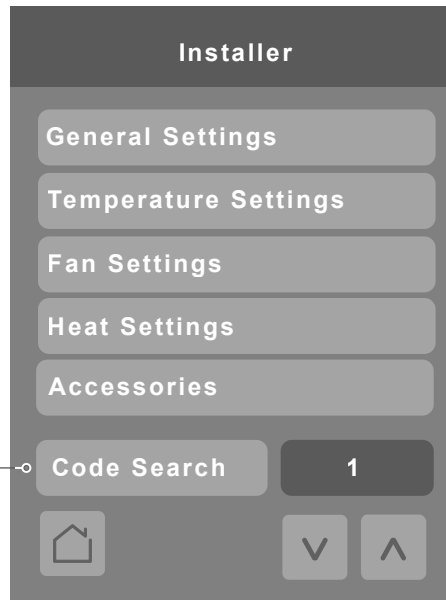
Installer

Press the Installer button on the Configuration screen to display the Installer screen. The Installer menu lists the controller's setup parameters and the accessories menu.

Code Search

Use the Up and Down arrows to choose an available Function Code and select the Code Search button to navigate to the screen where that function code resides.

Codes can be found in brackets next to a parameter throughout all menus. This function is used for quicker menu navigation.



CONFIGURATION SCREENS

General Settings

There are four Installer / General Settings screens. Press General Settings on the Installer screen to display the first General Settings screen. Press the right arrow on the screen to display screens 2, 3, and 4.

This value will be used to decide if Auto mode appears in the Operation Mode screen and whether to show "Auto" text at the top of the Home screen during Auto operation mode.

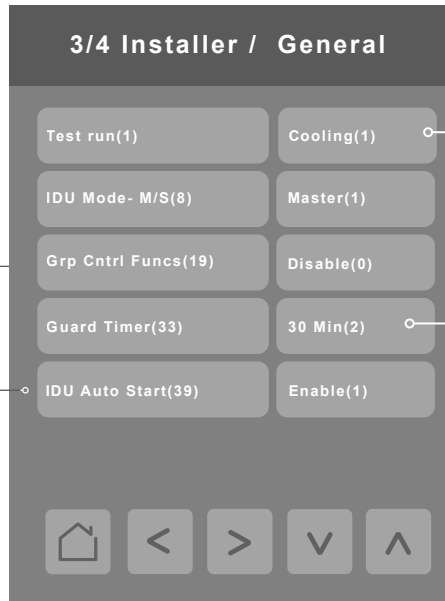


Parameter	Parameter Settings	Definition
Central Controller Add. Group(2)	Choices: 0 - F Default value = 0	Assigns a unique hexadecimal address when used with a central controller
Central Controller Add. Unit(2)	Choices: 0 - F Default value = 0	Assigns a unique hexadecimal address when used with a central controller
Auto mode	Choices: Enable, Disable Default value = Disable	Enables Auto mode on Home screen. Auto mode is available only when the IDU is a master unit (function code 8).



Parameter	Parameter Settings	Definition
ODU Mode - M/S (47)	0 = "Slave (0)" 1 = "Master (1)" Default value = Slave (0)	Sets the ODU as a master or slave unit. Outdoor unit controls are available only when the ODU is configured as master.

CONFIGURATION SCREENS



Use this function to enable or disable Group Control for the system.

Use this function to enable or disable Indoor Unit Auto Start.

Using the Up and Down arrows select between Heating, Cooling or Off modes. The Test run will end after 18 minutes and then turn system off. Test mode can be interrupted by changing fan speed, set point, or turning off the IDU from the home screen.

Using the Up and Down arrows select a guard time of 0, 15, 30, 45 or 60 minutes.

Parameter	Parameter Settings	Definition
Test run(1)	Choices: Off(0), Cooling(1), Heating(2) Default value = Off	Initiates an IDU test mode
IDU Mode - M/S(8)	Choices: Slave(0), Master(1) Default value = Slave(0)	Sets the IDU as a master or slave unit
Grp Cntrl Funcs(19)	Choices: Disable(0), Enable(1) Default value = Disable(0)	Enables additional common functions across IDUs when configured in group control
Guard Timer(33)	Choices in minutes: 0 min(0), 15 min(1), 30 min(2), 45 min(3), 60 min(4) Default value = 15 min(1)	Protects the compressor against repetitive and short duration changes in system mode
IDU Auto Start(39)	Choices: Enable(0), Disable(1) Default value = Enable(0)	Turns on the IDU automatically after power is restored to the IDU

CONFIGURATION SCREENS



Parameter	Parameter Settings	Definition
Silnt Mde Cntrl Loc	Choices: 0 = "ODU(0)" 1 = "Remote1(1)" Default value = ODU(0)	Reduces the refrigerant noise during IDU initialization in heating mode
ODU Cyc Prio	Choices: "Disable" "Standby(1)" "Prio Cool(2)" Default value = " Disable "	<p>When ODU Cyc Prio(56) is set to Standby(1) on the CRC1, if the ODU is in cooling mode and the slave IDU calls for heating, the slave IDU goes thermal off and stays in cooling mode.</p> <p>When ODU Cyc Prio(56) is set to Priority Cool(2) on the CRC1, if the ODU is in heating mode and the slave IDU calls for cooling, the IDU will wait the amount of time set by Therm Off Delay(56) after the master IDU is heating thermal satisfied and the ODU will then switch to cooling mode.</p>
Therm Off Delay	Choices: "45 min(0)" "30 min(1)" "60 min(2)" "90 min(3)" "120 min(4)" Default value = " 45 min(0) "	Time duration for IDU thermal off delay.

CONFIGURATION SCREENS

Temperature Settings

Press the Temperature Settings button on the Installer screen to display the Temperature Settings screen. Press the right arrow button to display the second page of the Temperature Settings screen.

1/2 Temperature Settings

Temp Sens Loc(4)

RC(1)

Room Temp Calib

(61)

Set Point Prec. (17)

1°C(1)

Single SP Deadband

4°F(2)

2/2 Temperature Settings

Heat. Therm(15)

4°F/7°F (2)

Cool. Therm(27)

2°F/-2°F (3)

Parameter	Parameter Settings	Definition
Temp Sens Loc (4)	1 = "RC" (1)", 2 = "IDU (2)", 3 = "2TH (3)" Default value = RC(1)	Selects between sensing temperature at the remote controller RC(1), the indoor unit IDU(2), or both sensors 2TH(3)
Setpoint °C Prec. (17)	1°C(0), 0.5°C(1) Default value = 1°C(0)	Chooses whether to display Celsius temperatures with 0.5 degree resolution or not
Single SP Deadband	1 = "2°F (1)" 5 = "10°F (5)" 2 = "4°F (2)" 6 = "12°F (6)" 3 = "6°F (3)" 7 = "14°F (7)" 4 = "8°F (4)" Default value = Dual SP (when supported)	Differential temperature between the heating setpoint (the value chosen as your setpoint) and cooling setpoint
Heat Therm(15)	0 = "Default (0)" 1 = "8°F/12°F (1)" 2 = "4°F/8°F (2)" 3 = "-2°F/2°F (3)" 4 = "-1°F/1°F (4)" Default value = Default(0)	Provides an adjustable band around the heating setpoint through selectable heating thermal on/off values
Cool Therm(27)	0 = "1°F/-1°F (0)" 1 = "12°F/8°F (1)" 2 = "8°F/4°F (2)" 3 = "2°F/-2°F (3)" Default value = 1°F/-1°F (0)	Provides an adjustable band around the cooling setpoint through selectable cooling thermal on/off values

CONFIGURATION SCREENS

Fan Settings

Press the Fan Settings button on the Installer screen to display the Fan Settings screen.

Press the right arrow button to display the second page of the Fan Settings screen.

To set static pressure for ducted IDUs, press the right arrow button on the second fan settings screen to display the third fan settings screen.

1/4 Fan Settings

Fxd Fan Speed(11)	Fan Low(0)
Fan/Vnt inter(38)	Fan Off(0)
Cool Therm Off(35)	Fan Off(0)
Ceiling height(5)	11.9-13.8'(4)
Static pressure(6)	Fixed H(2)

2/4 Fan Settings

Sta Pres Step(32)	Use SP(0)
Fan Auto Therm Off	Enable(1)
IDU Auto Dry	Disable(0)
Cont Therm Off(46)	Disable(0)
Speed By Temp(51)	Enable(1)

Parameter	Parameter Settings	Definition
Fxd Fan Speed(11)	Choices: IDU Cntrl (0), No Chng (1) Default value = IDU Cntrl(0)	Selects a fixed fan speed
Fan/Vnt inter(38)	Choices: Fan Off (0), Fan Slow (1) Default value = Fan Off(0)	For cassette IDUs only. Provides option for slow fan speed when ventilation interlocking is present to prevent dust on filter blowing back into the conditioned space
Cool Therm Off(35)	Choices: Fan Low (0), Fan Off (1), No Chng (2) Default value = Low(0)	Turns fan off during cooling thermal satisfied
Ceiling height(5)	Choices: 0 = "8.8-10.6' (0) - Stndrd" 1 = "< 8.8' (1) - Low" 2 = "10.5 – 11.8' -High (2)" 3 = "11.9-13.8' - Very High (3)" Default value = 8.8-10.6'(0)	Selects the height of the room for proper indoor unit operation
Static pressure(6)	Choices: 1 = "Var. H (1)", 2 = "Fixed H (2)", 3 = "Var. L (3)", 4 = "Fixed L (4)" Default value = Fixed H(2)	For ducted IDUs only. Provides four coarse adjustments in static pressure
Sta Pres Step(32)	Choices: 0 = "Use SP (0)" 1 = "SPS 1 (1)" 2 = "SPS 2 (2)" 3 = "SPS 3 (3)" 4 = "SPS 4 (4)" 5 = "SPS 5 (5)" 6 = "SPS 6 (6)" 7 = "SPS 7 (7)" 8 = "SPS 8 (8)" 9 = "SPS 9 (9)" 10 = "SPS 10 (10)" 11 = "SPS 11 (11)" Default = Use SP(0)	For ducted IDUs only. Provides eleven granular adjustments in static pressure
Fan Auto Therm Off	Choices: 0 = "Disable (0)", 1 = "Enable (1)" Default value = Disable(0)	IDU logic controls fan speed at thermal off
IDU Auto Dry	Choices: 0 = "Disable (0)", 1 = "Enable (1)" Default value = Disable(0)	For cooling and dry mode only. Fan runs after cooling thermal off to dry fan coil.
Cont Therm Off(46)	Choices: 0 = "Disable (0)", 1 = "Enable (1)" Default value = Disable(0)	Allows continuous operation of IDU fan even if cooling thermal satisfied is achieved
Speed By Temp(51)	Choices: 0 = "Disable (0)", 1 = "Enable (1)" Default value = Disable(0)	Changes fan speed automatically according to the differential temperature between the conditioned space and setpoints

Fan Settings

Press the Fan Settings button on the Installer screen to display the Fan Settings screen.

Press the right arrow button to display the second page of the Fan Settings screen.

Press the right arrow button on the second Fan Settings screen to display the third page of the Fan Settings screen.

Note:

Refer to the IDU's engineering manual for static pressure values.

Parameter	Parameter Settings	Definition
ESP slow (3)	Refer to ducted indoor unit engineering manual for specific values	For ducted indoor units only. Provides granular adjustment in static pressure. Function codes 5, 6, and 32 cannot be used when Fan Settings ESP is used. To use function codes 5, 6, and 32 for fan settings, all settings on this screen must be zero (0).
ESP low (3)		
ESP medium (3)		
ESP high (3)		
ESP power (3)		

CONFIGURATION SCREENS

Heat Settings

Press the Heat Settings button on the Installer screen to display the 1/2 Heat Settings screen.

Use this function to enable or disable auxiliary heat control.

Using the Up and Down arrows select between Disable, Non-Ducted and Ducted.

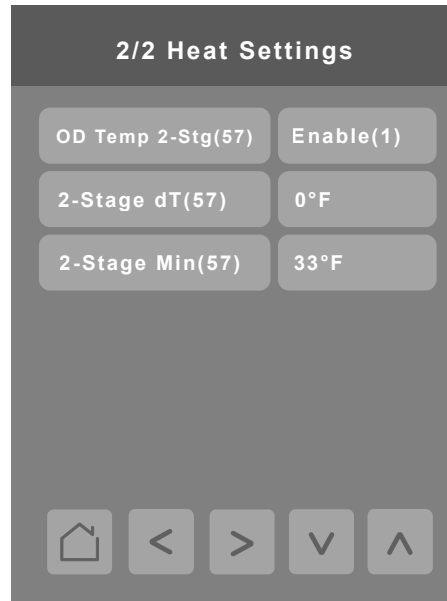
Select between Primary Heat First and Primary Heat Last.

Available when option is installed on Dual Vane 4-Way Cassette..

Parameter	Parameter Settings	Definition
Ext Aux Heat (25)	Choices: 0 = 'Disable (0)', 1 = "Non-Duct (0)" , 2 = "Ducted (1)" Default value = Disabled(0)	Enables use of an external auxiliary heat kit
Aux Heat Cntrl(21)	This control is used to enable related control on MORE screen that actually turns the Aux Heat on or off Choices: 0 = "Disable (0)" , 1 = "Enable (1)" Default value = Disabled(0)	Enables or disables the auxiliary heater
Prim Heat Cntrl(36)	Choices: HP First (0), HP Last (1) Default value = HP First(0)	Enables or disables the primary heater
Emerg Heat (18)	Use this function to enable or disable emergency heating. Choices: 0 = "Disable (0)" , 1 = "Enable (1)" Default value = Disabled(0)	Allows use of an auxiliary heater when the outdoor unit is not working properly. Wait 2 seconds after enabling control to be taken to Heater and Fan sub-controls.
Floor Temp Sensing	Option must be installed on 4-way cassette to use this function. Choices: 0 = "Disable (0)" , 1 = "Enable (1)" Default value = Enabled(1)	Uses optional sensor installed on grill to sense the temperature of the floor and control the IDU based on floor temperature.

Heat Settings

Press the right arrow button on the first heater screen to display the 2/2 Heat Settings screen.



Parameter	Parameter Settings	Definition
OD Temp 2-Stg (57)	0 = "Disabled(0)" 1 = "Enabled (1)" Default value = Disabled(0)	Outdoor temperature 2-stage heating control
2-Stage dT(57)	Range: 0 - 70 °F Default value = 0 °F	
2-Stage Min(57)	Range: -10 - 60 °F Default value = 33 °F	

CONFIGURATION SCREENS

Emergency Heater Settings

Press the Emergency Heater button on the Heat Settings screen to display the Emergency Heater Settings screen.



Parameter	Parameter Settings	
Heater	Choices: Column 1 or Column 2 Default value = Disabled(0) - Provides Aux Heat during error. Only Column 1 is available on Gen. 2 equipment. Column 2 values are available on Gen. 4 and newer equipment.	
	Column 1 1 – “-10°F / -5°F (1)” 2 – “-5°F / 0°F (2)” 3 – “0°F / 5°F (3)”	Column 2 1 – “-10°F / -5°F (1)” 2 – “-5°F / 0°F (2)” 3 – “0°F / 5°F (3)” 4 – “5°F / 10°F (4)” 5 – “10°F / 15°F (5)” 6 – “15°F / 20°F (6)” 7 – “20°F / 25°F (7)” 8 – “25°F / 30°F (8)” 9 – “30°F / 35°F (9)” 10 – “35°F / 40°F (10)” 11 – “40°F / 45°F (11)” 12 – “45°F / 50°F (12)” 13 – “50°F / 55°F (13)” 14 – “55°F / 60°F (14)” 15 – “60°F / 65°F (15)”
Fan	Off (0), On (1) Default value = Off(0)	

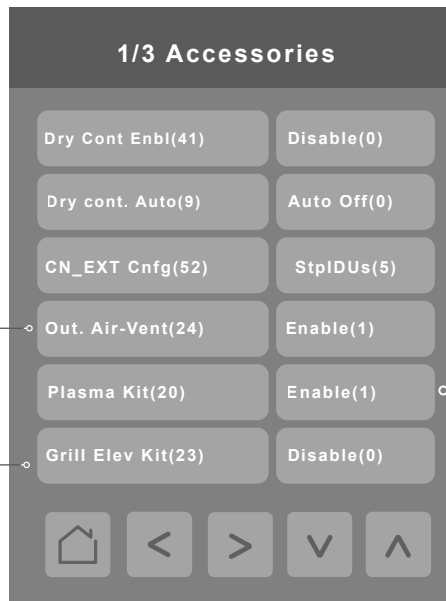
CONFIGURATION SCREENS

Accessories

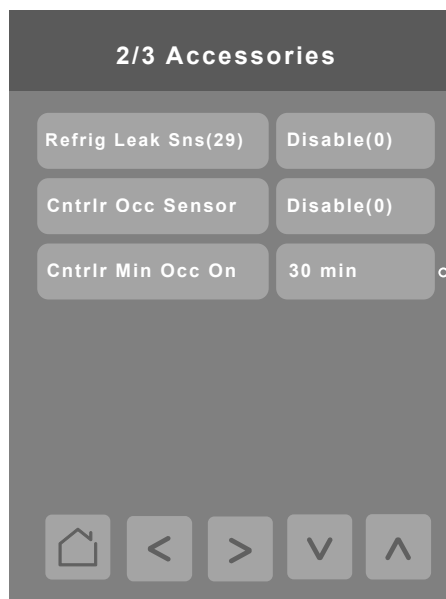
Press the Accessories button on the Installer screen to display the Accessories screen. Press the right arrow to display the second and third pages of the Accessories screen.

This option enables the related control on the MORE screen that turns the Vent kit on or off.

This option enables the related control on the Filter Functions screen that controls Raise/Lower Grill functions.



This option enables the related control on the MORE screen that turns the Plasma Purifier on or off.



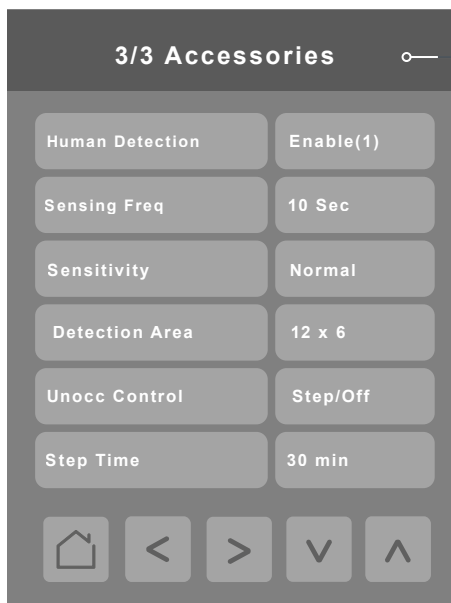
Global setting which applies to both the onboard PIR sensor as well as any installed ZigBee motion sensors.

CONFIGURATION SCREENS

Accessories – continued

Parameter	Parameter Settings	Definition
Dry Cont Enbl(41)	Choices: 0 = "Default (0)" 1 = "Not Used (1)" 2 = "Enabled (2)" 3 = "Use CN_EXT (3)" Default value = Default(0)	Enables use of a dry contact through the CN_CC connector of the IDU
Dry cont. Auto(9)	Choices: 0 = "Auto Off (0)", 1 = "Auto On (1)" Default value = Disabled(0)	Enables auto run feature when used in conjunction with a simple dry contact
CN_EXT Cnfg (52)	Choices: 0 = "Disable (0)" 1 = "On/Off (1)" 2 = "DryCntct (2)" 3 = "Stp1IDU (3)" 4 = Reserved 5 = "StpIDUs (5)" Default value = Disabled(0)	Configures how the onboard dry contact (CN_EXT) will be used. Visit www.lghvac.com/resources/ and filter under White Papers and Controls for more information on using the IDU onboard simple dry contact.
Out. Air – Vent (24)	Choices: 0 = "Disable (0)", 1 = "Enable (1)" Default value = Disabled(0)	Used to inform the IDU that a ventilation kit is installed. Enabling this control enables a related control on the More screen to control ventilation.
Plasma Kit (20)	Choices: 0 = "Disable (0)", 1 = "Enable (1)" Default value = Disabled(0)	Enables or disables the plasma purification function. A plasma kit is required.
Grill Elev. Kit (23)	Choices: 0 = "Disable (0)", 1 = "Enable (1)" Default value = Disabled(0)	For cassette IDUs only when kit is installed. Enables controls that allow lowering of the grill to provide easy access to the filter.
Refrig Leak Sns(29)	Choices: 0 = "Disable (0)", 1 = "Enable (1)" Default value = Disabled(0)	Enables the refrigerant leak sensor
Cntrlr Occ Sensor	Choices: 0 = "Disable", 1 = "Enable" Default value = Disabled(0)	Enables or disables the occupancy sensor, either onboard PIR sensor or Zigbee sensor(s)
Cntrlr Min Occ On	Choices: 0 = "10 min (0)" 1 = "30 min (1)" 2 = "60 min (2)" Default value = 10 min (0)	Time the controller will wait before the occupancy status changes to unoccupied when no motion is detected by the sensor

Accessories – continued



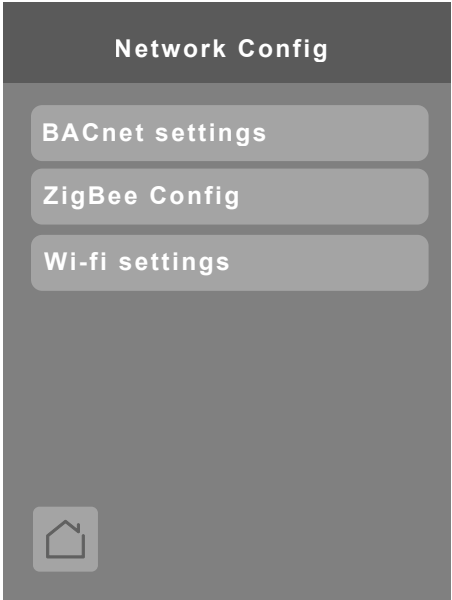
Features on the 3/3 Accessories screen are available when Human Detection option is installed on Dual Vane 4-Way Cassette.

Parameter	Parameter Settings	Definition
Human Detection	Choices: 0 = "Disable (0)" 1 = "Enable (1)" 2= "90° Instl (2)" Default value = Disable (0)	Enables use of Human Detection features when this option is installed on a Dual Vane 4-Way Cassette.
Sensing Freq	Choices: 0 = "30 sec (0)" 1 = "5 sec (1)" 2 = "1 min (2)" 3 = 3 min (3)" Default value = 30 sec (0)	Sets the interval at which the Human Detection sensor will check for occupancy.
Sensitivity	Choices: 0 = "Normal (0)" 1 = "Low (1)" 2= "High (2)" Default value = Disable (0)	Configures the sensitivity of the Human Detection sensor.
Detection Area	Choices: 0 = "12 x 6" 1 = "6 x 6" 2= "Flr Det" Default value = 12 x 6	Used to set the detection area for Human Detection option
Unocc Control	Choices: 0 = "Disable (0)" 1 = "Unocc/Off" 2= "Step/Off" Default value = Disable (0)	Configures operation of IDU when Human Detection sensor detects unoccupied status. Unocc/Off turns off IDU when unoccupied with IDU returning to On state when occupied. Step/Off gradually changes setpoint before turning IDU off.
Step Time	Choices: 0 = "30 min", 1 = "5 min", 2 = "10 min", 3 = "15 min", 4 = "60 min", 5 = "90 min" Default value = 30 min	Sets the incremental setpoint change (or "step") time for Unocc Control when set to Step/Off.

CONFIGURATION SCREENS

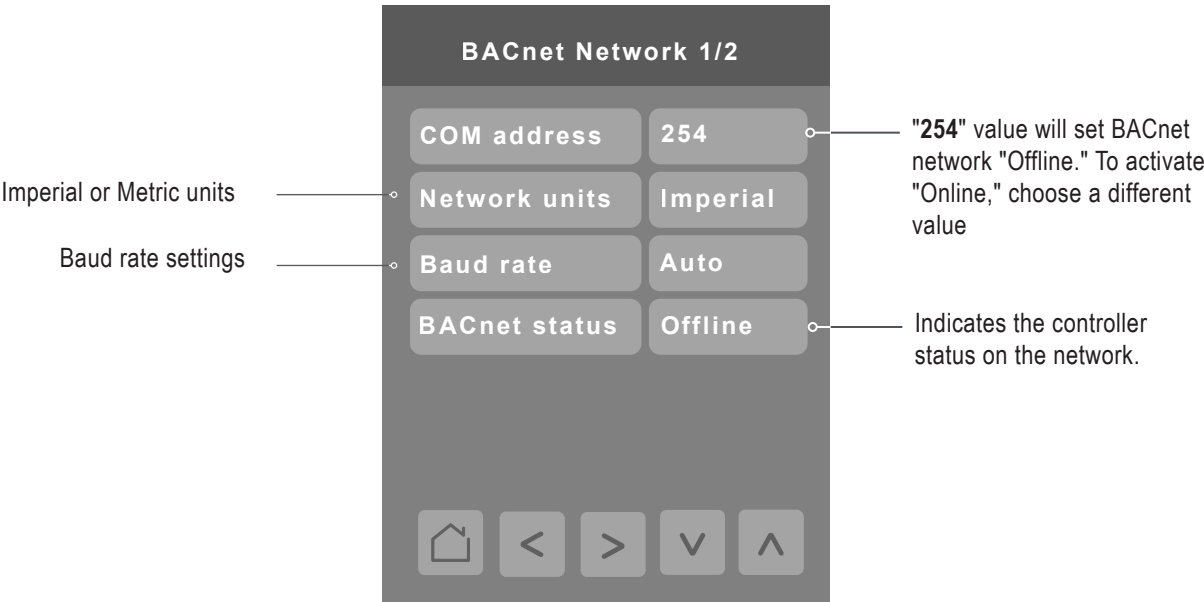
BMS Configuration

Press the BMS Config button on the Configuration screen to display the BMS Config screen.



BACnet Settings

Press the BACnet* settings button on the BMS Config screen to display the BACnet Network screen. Press the right arrow to display the BACnet Instance screen.



**BACnet is a registered trademark of ASHRAE*

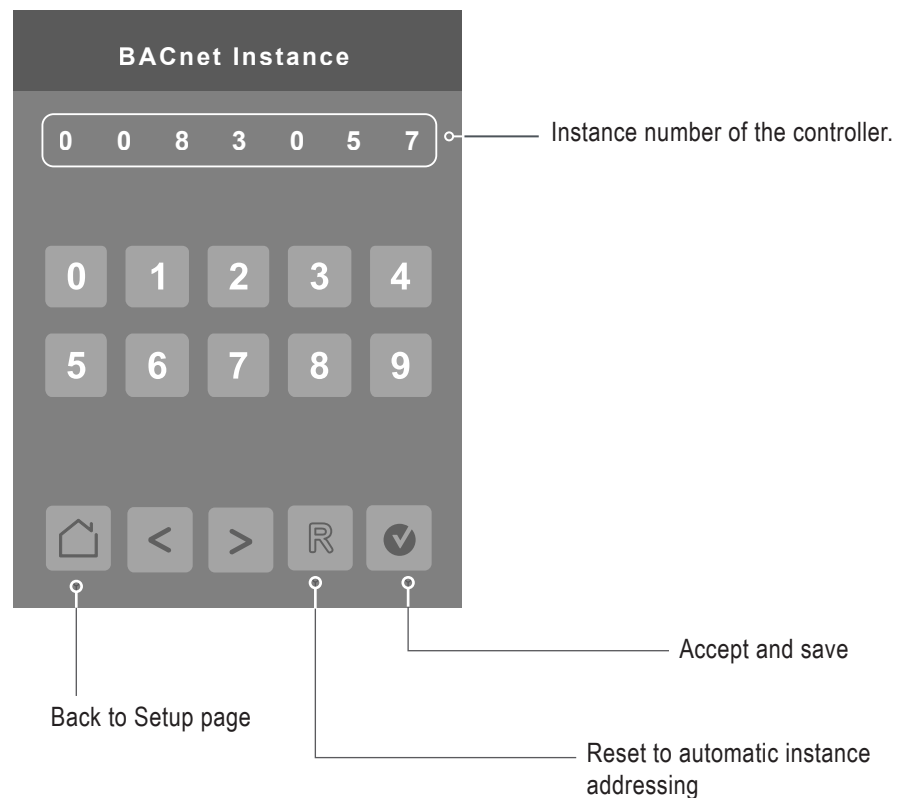
BACnet Settings – continued

Parameter	Parameter Settings	Definition
COM address	Communications Address Range is: 0 to 254 Default value = 254	Terminal Equipment Controller Networking address. For BACnet MS/TP models, the valid range is from 0 to 253. Default value of 254 disables BACnet communication for the Controller.
Network units	Measurement Units Choices: Imperial, SI Default value = SI	Imperial: Network units shown as “imperial” units. SI: Network units shown as “international metric” units.
Baud rate	Baud Rate Choices: (115200) (76800) (57600) (38400) (19200) (9600) Auto Default value = Auto	Auto: Will automatically detect the BACnet MS/TP baud rate. Leave the value at Auto unless instructed otherwise.

The default BACnet instance number is generated by the model number and COM address of the controller. For example, the instance number of a MultiSITE CRC1 Series 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.



CONFIGURATION SCREENS

ZigBee Configuration

Press the ZigBee* Config button on the BMS Config screen to display the ZigBee Configuration screen.

Status of controller detecting a ZigBee network. Will display Online when connected successfully to network.

1/3 Zigbee Configuration

COM address	254
Node type	Coord.
Zigbee PAN ID	11
Zigbee channel	15
Zigbee short	0x0000
Zigbee status	No NWK

Navigation buttons: Home, Left, Right, Down, Up

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

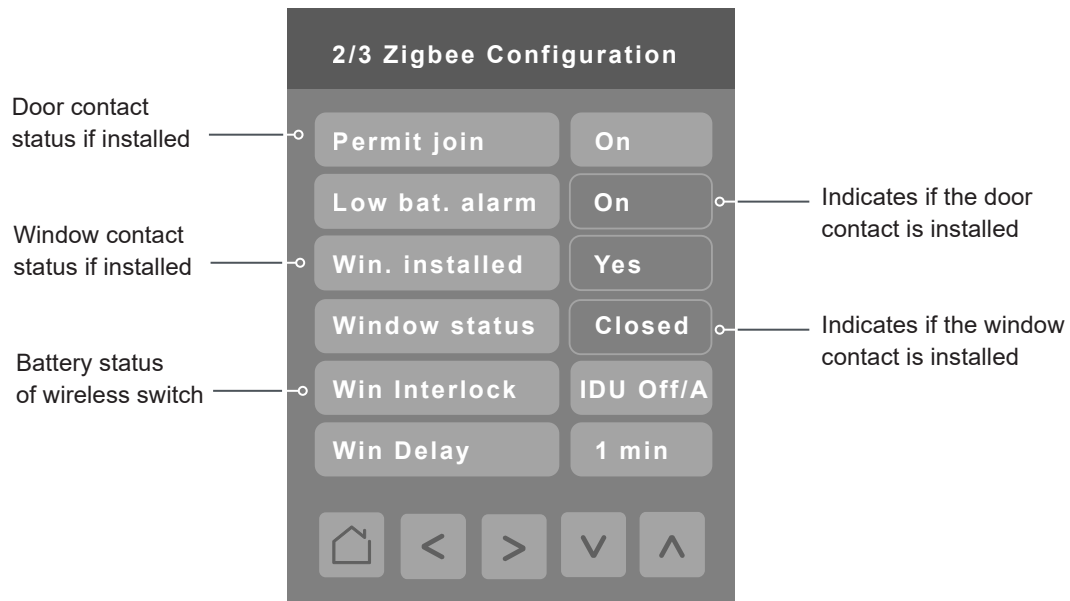
Parameter	Parameter Settings	Definition
COM address	Terminal Equipment Controller networking address Range is: 0 to 254 Default value = 254	For wireless models, the use of the COM address is not mandatory. COM address is an optional way to identify a device on the network and is recommended if used with an MPM. It is Mandatory for BACnet.
Node type	Choices: Coord; Router	Set Node type to Coord if controller will be responsible for controlling Zigbee sensor network.
ZigBee Pan ID	Personal Area Network Identification Range is: 1 to 1000 Default value = 0	This parameter (PAN ID) links specific Controllers to specific ZigBee coordinators. For every Controller reporting to a coordinator, make sure to set the SAME channel value both on the coordinator and the Controllers. The default value of 0 is NOT a valid PAN ID. The valid range of available PAN ID is from 1 to 1000.
ZigBee channel	Channel selection Using channels 15 and 25 is recommended. The valid range of available channels is from 11 to 25. Range is: 10 to 25 Default value = 10	This parameter (Channel) is used to link specific Controllers to specific ZigBee coordinators. For every Controller reporting to a coordinator, be sure you set the SAME channel value both on the coordinator and the Controller(s). The default value of 10 is NOT a valid channel.
ZigBee status	Read only	The following read only messages show in this field: <ul style="list-style-type: none"> (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

*ZigBee is a registered trademark of the ZigBee Alliance.

CONFIGURATION SCREENS

ZigBee Configuration – continued

Press the right arrow on the ZigBee Configuration screen to display the second page of the ZigBee Configuration screen. The blue fields indicate the controller is paired with a sensor.



Parameter	Parameter Settings	Definition
Permit join	Choices: Off, On Default value = On	Changing this value to "Off" will lockout any new ZigBee devices from joining the network through this controller.

CONFIGURATION SCREENS

ZigBee Configuration – continued

Press the right arrow on the ZigBee Configuration screen to display the third page of the ZigBee Configuration screen.



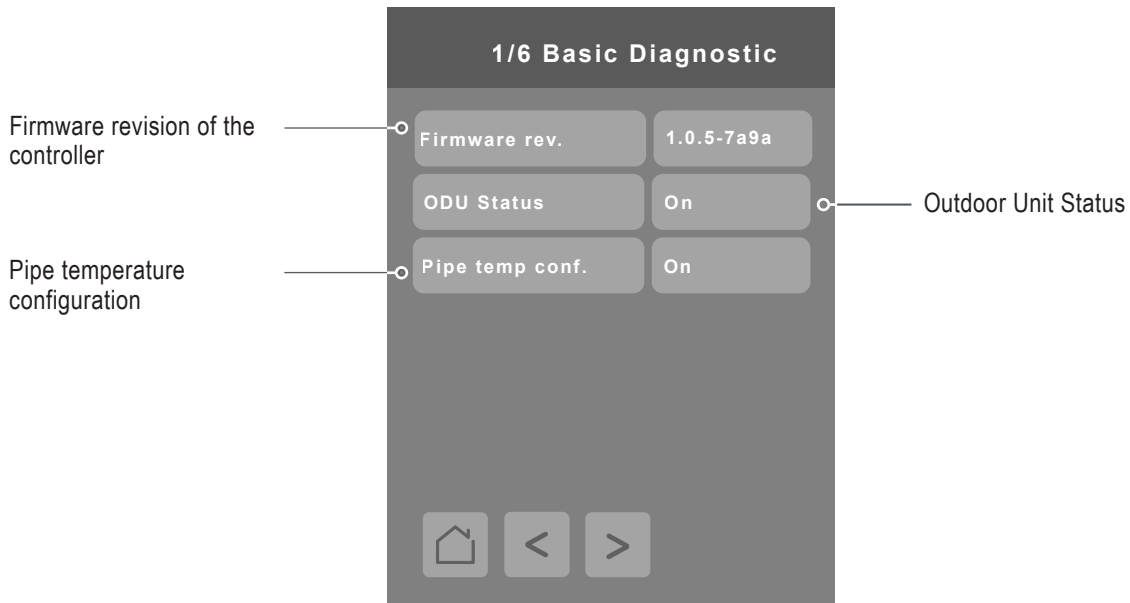
Only last 4 digits in
HEX displayed

Parameter	Parameter Settings	Definition
IEEE address	The extended IEEE ZigBee node address is used to identify the device on the network. Default value = 0x0000	Address of the Zigbee wireless card
Win Delay	Choices: 0 min (0), 0.5 min (1), 1 min (2), 2 min (3), 5 min (4) Default value = 0 min (0)	Sets the duration to ignore status of Zigbee window inputs
Win Interlock	Choices: Disable (0), IDU Off/A (1), IDU Off/M (2) Default = Disable (0)	Provides the ability to interlock IDU operation with status of a Zigbee window switch. Setting control to "IDU Off/A" causes the IDU to come back on automatically when window is re-closed after opening. Setting control to "IDU Off/M" requires the user to manually turn the IDU back on from the controller once the window is re-closed.

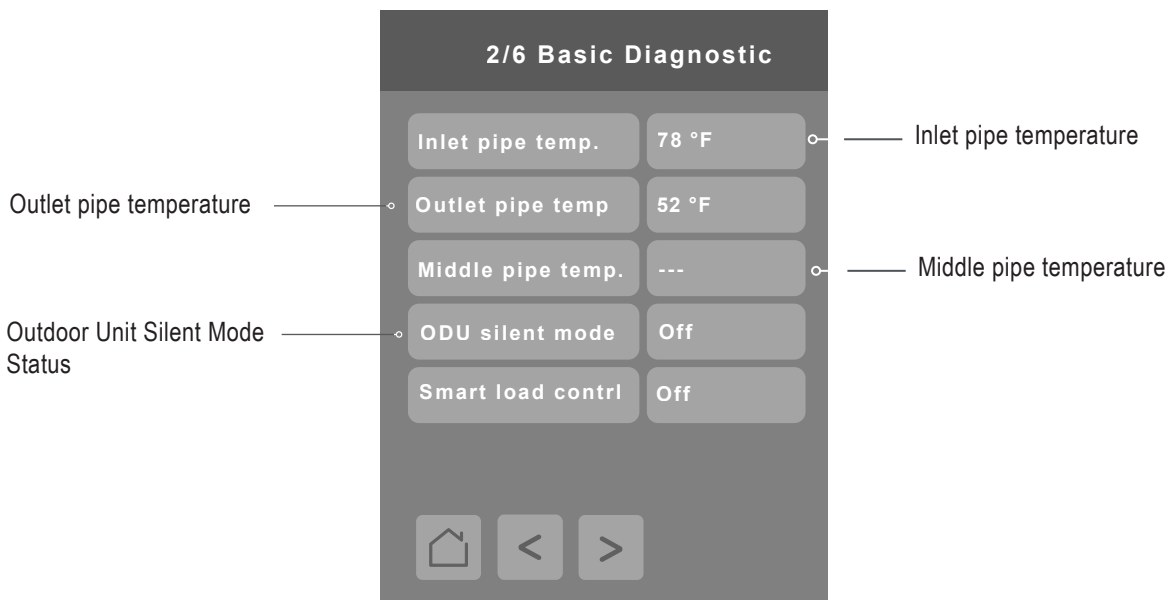
CONFIGURATION SCREENS

Basic Diagnostic

Press the Basic Diagnostic Button on the Configuration screen to display the Basic Diagnostic screen.



Press the right arrow on the Basic Diagnostic screen to display the next Basic Diagnostic screen.



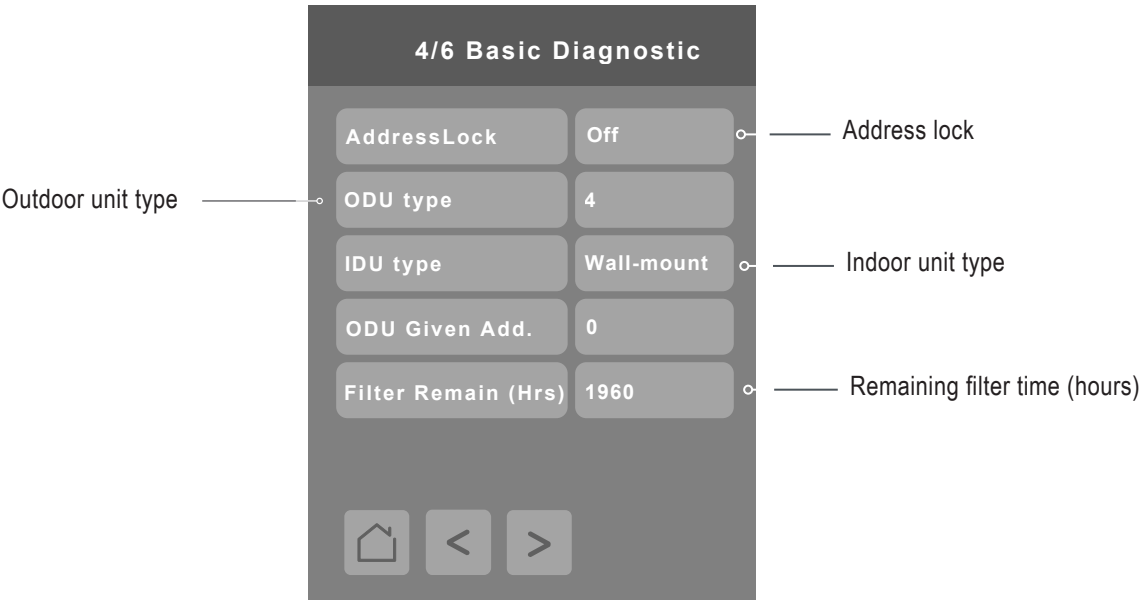
CONFIGURATION SCREENS

Basic Diagnostic – continued

Press the right arrow on the Basic Diagnostic screen to display the next Basic Diagnostic screen.



Press the right arrow on the Basic Diagnostic screen to display the next Basic Diagnostic screen.



Basic Diagnostic – continued

Press the right arrow on the Basic Diagnostic screen to display the next Basic Diagnostic screen.

Screens 5/6 Basic Diagnostic and 6/6 Basic Diagnostic display a historical list of the 10 most recent error codes generated by the Indoor Unit. The most recent error code appears at the top of the list.

5/6 Basic Diagnostic	
Current Error Code	0
Previous Error Code	0
Error Code	0
Error Code	0
Error Code	0
Error Code	0

Navigation buttons: Home, Left Arrow, Right Arrow

Press the right arrow on the Basic Diagnostic screen to display the Basic Diagnostic screen.

6/6 Basic Diagnostic	
Error Code	0
Error Code	0
Error Code	0
Error Code	0
Oldest saved error	0

Navigation buttons: Home, Left Arrow, Right Arrow

CONFIGURATION SCREENS

Password Setup

Press the Password Setup button on the Configuration screen to display the Password Setup screen.



Parameter	Parameter Settings	Definition
Config password	Range is: 0 to 9999. Default value = 0	This parameter sets a protective access password to prevent unauthorized access to the configuration menu parameters. The default value of “0” will not prompt the user for a password or lock the access to the configuration menu. User must include any leading “0” if anything less than a 4-digit code is selected for a password.
User password	Range is: 0 to 9999. Default value = 0	This parameter sets a protective access password to prevent user unauthorized access to main screen adjustments. The default value of “0” will not prompt for a password.

Factory Default

Answering Yes to both parameters and tapping 'push to accept' erases all values and sets the controller to factory default values.

Note:

Once in the Factory Default screen, if user proceeds with this step, all schedules and current controller settings, along with time and date will be cleared. There is no way to recover settings once a Factory Default has been performed.

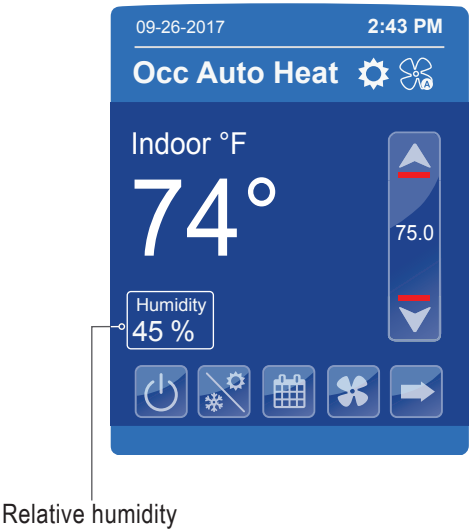
Please wait at least five (5) minutes after performing a Factory Default reset for synchronization to complete between the IDU and the remote controller.



CONFIGURATION SCREENS

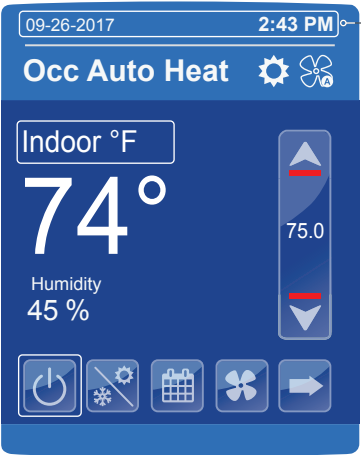
Relative Humidity Display

Relative humidity is displayed on the MultiSITE CRC1+ controller only. Apart from the visual indication of relative humidity, this data is also available as a monitoring point via MSTP BACnet to be used by the user as desired.



Time and Date

Time and date are displayed at the top of the home screen.



Time and Date will display when updated in display settings. Time and Date must be reset if Controller is set to factory default values.

PIR (Motion Sensor)

The MultiSITE CRC1+ version of the controller comes with an onboard PIR style motion sensor. If the sensor is enabled (installer configuration under Accessories), status from the PIR sensor will be used to control the operation of the IDU as follows:

If the IDU status is currently Occupied and the onboard PIR goes Unoccupied, the IDU will operate according to the Setback values of the controller and will change its status to Unoccupied.

If the IDU status is currently Unoccupied and the onboard PIR goes Occupied, the IDU will operate according to the settings in use during the last Occupied status and will change its status to Occupied.

If the IDU is currently in Setback or Override modes, information from the PIR sensor will be ignored.

BACNET POINTS

Controller BACnet Points

BACnet points for the CRC1 and CRC1+ controllers are listed below and on the following pages.

Name	Type	Read/Write	BACnet Object ID	Device Facets
CRC1x-123-systemStatus	Enum Point	Write	device:83xxx	N/A
ZB_LowBattAlarm	Binary Value	Write	5	N/A
DisplayLongScreenMsg	Binary Value	Write	7	N/A
ForceHighBacklight	Binary Value	Write	6	N/A
FilterAlarm_M	Binary Value	Read	500	N/A
FilterAlarmRelease	Binary Value	Write	510	N/A
MsgAddressLock_M	Binary Value	Read	533	N/A
MsgOverrideActive	Binary Value	Write	541	N/A
MsgSetbackActive	Binary Value	Write	542	N/A
USB Logger	Binary Value	Write	550	N/A
ZB_Snsr_Wn_Interlock_M	Binary Value	Read	552	Window Interlock Deactivated, Window Interlock Activated
MsgShortScreenMsgTxt	characterStringValue	Write	1	N/A
MsgLongScreenMsgTxt	characterStringValue	Write	2	N/A
ZB_Zone1IEEEaddrs_M	Analog Input	Read	210	N/A
ZB_Zone2IEEEaddrs_M	Analog Input	Read	220	N/A
ZB_Zone3IEEEaddrs_M	Analog Input	Read	230	N/A
ZB_Zone4IEEEaddrs_M	Analog Input	Read	240	N/A
ZB_Zone5IEEEaddrs_M	Analog Input	Read	250	N/A
ZB_Zone6IEEEaddrs_M	Analog Input	Read	260	N/A
ZB_Zone7IEEEaddrs_M	Analog Input	Read	270	N/A
ZB_Zone8IEEEaddrs_M	Analog Input	Read	280	N/A
ZB_Zone9IEEEaddrs_M	Analog Input	Read	290	N/A
ZB_Zone10IEEEaddrs_M	Analog Input	Read	300	N/A
FilterRemainTime_M	Analog Input	Read	500	N/A
CurrentErrorCode_M	Analog Input	Read	503	N/A
PipeInTemp_M	Analog Input	Read	506	N/A
PipeOutTemp_M	Analog Input	Read	507	N/A
MiddlePipeTemp_M	Analog Input	Read	508	N/A
ODUgivenAddrs_M	Analog Input	Read	509	N/A
CoolingSP	Analog Value	Write	40	N/A

MultiSITE CRC 1 Controller

Name	Type	Read/Write	BACnet Object ID	Device Facets
HeatingSP	Analog Value	Write	39	N/A
ConfigPassword	Analog Value	Write	56	N/A
BACnetComAddr	Analog Value	Write	10	N/A
MinDeadband	Analog Value	Write	63	N/A
BACnet Stack Poll Rate	Analog Value	Write	16	N/A
DisplayLowBacklight	Analog Value	Write	3	N/A
UserPassword	Analog Value	Write	57	N/A
SingleSP	Analog Value	Write	507	N/A
SingleSetpointMax	Analog Value	Write	508	N/A
SingleSetpointMin	Analog Value	Write	509	N/A
CoolingSPMax	Analog Value	Write	510	N/A
CoolingSPMin	Analog Value	Write	511	N/A
HeatingSPMax	Analog Value	Write	512	N/A
HeatingSPMin	Analog Value	Write	513	N/A
OverrideCoolingSP	Analog Value	Write	601	N/A
OverrideHeatingSP	Analog Value	Write	602	N/A
SetbackCoolingSP	Analog Value	Write	605	N/A
SetbackHeatingSP	Analog Value	Write	606	N/A
PreviousErrorCode_M	Analog Value	Read	622	N/A
ErrorCode3_M	Analog Value	Read	623	N/A
ErrorCode4_M	Analog Value	Read	624	N/A
ErrorCode5_M	Analog Value	Read	625	N/A
ErrorCode6_M	Analog Value	Read	626	N/A
ErrorCode7_M	Analog Value	Read	627	N/A
ErrorCode8_M	Analog Value	Read	628	N/A
ErrorCode9_M	Analog Value	Read	629	N/A
ErrorCode10_M	Analog Value	Read	630	N/A
OldestErrorCode_M	Analog Value	Read	631	N/A
RoomHumidity	Analog Value	Write	103	N/A
RoomTemp	Analog Value	Write	100	N/A

BACNET POINTS

Name	Type	Read/Write	BACnet Object ID	Device Facets
ZB_NetworkStatus_M	Multi State Input	Read	2	Not Det = 1, Pwr On = 2, No NWK = 3, Joined = 4, Online = 5
ZB_Zone1Status_M	Multi State Input	Read	210	None = 1, Closed = 2, Opened = 3, No Motion = 4, Motion = 5
ZB_Zone2Status_M	Multi State Input	Read	220	None = 1, Closed = 2, Opened = 3, No Motion = 4, Motion = 5
ZB_Zone3Status_M	Multi State Input	Read	230	None = 1, Closed = 2, Opened = 3, No Motion = 4, Motion = 5
ZB_Zone4Status_M	Multi State Input	Read	240	None = 1, Closed = 2, Opened = 3, No Motion = 4, Motion = 5
ZB_Zone5Status_M	Multi State Input	Read	250	None = 1, Closed = 2, Opened = 3, No Motion = 4, Motion = 5
ZB_Zone6Status_M	Multi State Input	Read	260	None = 1, Closed = 2, Opened = 3, No Motion = 4, Motion = 5
ZB_Zone7Status_M	Multi State Input	Read	270	None = 1, Closed = 2, Opened = 3, No Motion = 4, Motion = 5
ZB_Zone8Status_M	Multi State Input	Read	280	None = 1, Closed = 2, Opened = 3, No Motion = 4, Motion = 5
ZB_Zone9Status_M	Multi State Input	Read	290	None = 1, Closed = 2, Opened = 3, No Motion = 4, Motion = 5
ZB_Zone10Status_M	Multi State Input	Read	300	None = 1, Closed = 2, Opened = 3, No Motion = 4, Motion = 5
ZB_Zone1BattStatus_M	Multi State Input	Read	211	None = 1, Normal = 2, Low = 3
ZB_Zone2BattStatus_M	Multi State Input	Read	221	None = 1, Normal = 2, Low = 3
ZB_Zone3BattStatus_M	Multi State Input	Read	231	None = 1, Normal = 2, Low = 3
ZB_Zone4BattStatus_M	Multi State Input	Read	241	None = 1, Normal = 2, Low = 3
ZB_Zone5BattStatus_M	Multi State Input	Read	251	None = 1, Normal = 2, Low = 3
ZB_Zone6BattStatus_M	Multi State Input	Read	261	None = 1, Normal = 2, Low = 3
ZB_Zone7BattStatus_M	Multi State Input	Read	271	None = 1, Normal = 2, Low = 3
ZB_Zone8BattStatus_M	Multi State Input	Read	281	None = 1, Normal = 2, Low = 3
ZB_Zone9BattStatus_M	Multi State Input	Read	291	None = 1, Normal = 2, Low = 3
ZB_Zone10BattStatus_M	Multi State Input	Read	301	None = 1, Normal = 2, Low = 3
ZB_Zone1PairingStatus_M	Multi State Input	Read	212	No = 1, Yes = 2, Invalid = 3
ZB_Zone2PairingStatus_M	Multi State Input	Read	222	No = 1, Yes = 2, Invalid = 3
ZB_Zone3PairingStatus_M	Multi State Input	Read	232	No = 1, Yes = 2, Invalid = 3
ZB_Zone4PairingStatus_M	Multi State Input	Read	242	No = 1, Yes = 2, Invalid = 3
ZB_Zone5PairingStatus_M	Multi State Input	Read	252	No = 1, Yes = 2, Invalid = 3
ZB_Zone6PairingStatus_M	Multi State Input	Read	262	No = 1, Yes = 2, Invalid = 3

Name	Type	Read/Write	BACnet Object ID	Device Facets
ZB_Zone7PairingStatus_M	Multi State Input	Read	272	No = 1, Yes = 2, Invalid = 3
ZB_Zone8PairingStatus_M	Multi State Input	Read	282	No = 1, Yes = 2, Invalid = 3
ZB_Zone9PairingStatus_M	Multi State Input	Read	292	No = 1, Yes = 2, Invalid = 3
ZB_Zone10PairingStatus_M	Multi State Input	Read	302	No = 1, Yes = 2, Invalid = 3
PipeTempCnfg_M	Multi State Input	Read	544	Off = 1, On = 2
ODUsilentMode_M	Multi State Input	Read	600	Off = 1, On = 2
SmartLoadCtrl_M	Multi State Input	Read	601	Off = 1, On = 2
OccStatus_M	Multi State Input	Read	602	Off = 1, On = 2
ODUstatus_M	Multi State Input	Read	603	Off = 1, On = 2
ODUType_M	Multi State Input	Read	604	MultiV = 1, Multi = 2, Single = 3, MultiV = 4
IDUType_M	Multi State Input	Read	605	Ceil Cass = 1, Duct = 2, CVT = 3, Commerical Floor Standing = 4, Wall Mount = 5, ERV DX = 6, Console = 7, Rooftop = 8, ERV = 9, AWHHP = 10, Hydrokit = 11, Hyd Cascade = 12, Show Case = 13, VAHU = 14, OAU = 15
AirQuality_M	Multi State Input	Read	611	Good = 1, Normal = 2, Bad = 3, Unhealthy = 4
TempUnits	Multi State Value	Write	51	Celsius = 1, Fahrenheit = 2
DisplayLanguage	Multi State Value	Write	4	English = 1, French = 2, Spanish = 3
FanSpeed	Multi State Value	Write	17	Low = 1, Med = 2, High = 3, Auto = 4, Slow = 5, Lmed = 6, Mhigh = 7, Cool = 8, Power = 9
SystemMode	Multi State Value	Write	16	Off = 1, Cool = 2, Heat = 3, Fan = 4, Auto = 5, Dry = 6
BACnetNetworkUnits	Multi State Value	Write	6	SI = 1, Imperial = 2
DisplayTimeFormat	Multi State Value	Write	5	AM/PM = 1, 24Hours = 2
DisplayColor	Multi State Value	Write	2	White = 1, Green = 2, Blue = 3, Grey = 4, Dark Grey = 5
DisplayUseStandbyScreen	Multi State Value	Write	32	No = 1, Yes = 2, Occ Only = 3, Screen = 4
ZB_Zone1SnsrType	Multi State Value	Write	210	None = 1, Window = 2, Door = 3, Motion = 4, Status = 5, Remove = 6, N/A = 7
ZB_Zone2SnsrType	Multi State Value	Write	220	None = 1, Window = 2, Door = 3, Motion = 4, Status = 5, Remove = 6, N/A = 7
ZB_Zone3SnsrType	Multi State Value	Write	230	None = 1, Window = 2, Door = 3, Motion = 4, Status = 5, Remove = 6, N/A = 7
ZB_Zone4SnsrType	Multi State Value	Write	240	None = 1, Window = 2, Door = 3, Motion = 4, Status = 5, Remove = 6, N/A = 7
ZB_Zone5SnsrType	Multi State Value	Write	250	None = 1, Window = 2, Door = 3, Motion = 4, Status = 5, Remove = 6, N/A = 7
ZB_Zone6SnsrType	Multi State Value	Write	260	None = 1, Window = 2, Door = 3, Motion = 4, Status = 5, Remove = 6, N/A = 7

BACNET POINTS

Name	Type	Read/Write	BACnet Object ID	Device Facets
ZB_Zone7SnsrType	Multi State Value	Write	270	None = 1, Window = 2, Door = 3, Motion = 4, Status = 5, Remove = 6, N/A = 7
ZB_Zone8SnsrType	Multi State Value	Write	280	None = 1, Window = 2, Door = 3, Motion = 4, Status = 5, Remove = 6, N/A = 7
ZB_Zone9SnsrType	Multi State Value	Write	290	None = 1, Window = 2, Door = 3, Motion = 4, Status = 5, Remove = 6, N/A = 7
ZB_Zone10SnsrType	Multi State Value	Write	300	None = 1, Window = 2, Door = 3, Motion = 4, Status = 5, Remove = 6, N/A = 7
DisplayShowOnOff	Multi State Value	Write	500	Show = 1, Hide = 2
DisplayShowMode	Multi State Value	Write	501	Show = 1, Hide = 2
DisplayShowSchedule	Multi State Value	Write	502	Show = 1, Hide = 2
DisplayShowMore	Multi State Value	Write	503	Show = 1, Hide = 2
DisplayShowSetTemp	Multi State Value	Write	504	Show = 1, Hide = 2
DisplayShowSpaceTemp	Multi State Value	Write	505	Show = 1, Hide = 2
DisplayShowFanSpeed	Multi State Value	Write	506	Show = 1, Hide = 2
DisplayShowHumidity	Multi State Value	Write	507	Show = 1, Hide = 2
TempSenseLoc	Multi State Value	Write	516	Remote Controller = 1, IDU = 2, 2TH = 3
IDUonOff	Multi State Value	Write	528	Off = 1, On = 2
AirflowUpDown	Multi State Value	Write	531	Off = 1, On = 2
AirflowLeftRight	Multi State Value	Write	532	Off = 1, On = 2
AirflowCircular	Multi State Value	Write	533	Off = 1, On = 2
SingleDualSP	Multi State Value	Write	538	SingleSP = 1, DualSP = 2
OverrideMode	Multi State Value	Write	700	Off = 1, Cool = 2, Heat = 3, Fan = 4, Auto = 5, Dry = 6
OverrideFanSpeed	Multi State Value	Write	701	Low = 1, Med = 2, High = 3, Auto = 4, Slow = 5, Low Med = 6, Med High = 7, Power Cool=8, Power = 9
OverrideTimer	Multi State Value	Write	703	30 = 1, 60 = 2, 90 = 3, 120 = 4, 150 = 5, 180 = 6, 210 = 7, 240 = 8
SetbackMode	Multi State Value	Write	704	Off = 1, Cool = 2, Heat = 3, Fan = 4, Auto = 5, Dry = 6
SetbackFanSpeed	Multi State Value	Write	705	Low = 1, Med = 2, High = 3, Auto = 4, Slow = 5, Low Med = 6, Med High = 7, Power Cool = 8, Power = 9
SingleSPdeadband	Multi State Value	Write	743	1°C = 1, 2°C = 2, 3°C = 3, 4°C = 4, 5°C = 5, 6°C = 6, 7°C = 7
CntrlrOccSensor	Multi State Value	Write	747	Disable=1,Enable=2

Name	Type	Read/Write	BACnet Object ID	Device Facets
ControllerMinOccOnTime	Multi State Value	Write	748	10 Minutes = 1, 30 Minutes = 2, 60 Minutes = 3
Disable schedules	Multi State Value	Write	763	Off = 1, On = 2
ZB_Snsr_Wn_Delay	Multi State Value	Write	766	0 Minutes = 1, 0.5 Minutes = 2, 1 Minute = 3, 2 minutes = 4, 5 Minutes = 5
ZB_Snsr_Win_Interlock	Multi State Value	Write	767	Disable = 1, IDUOff/Automatic = 2, IDUOff/Manual = 3

Who to call for assistance

Freight Damage and Unit Replacements

Missing Parts

Freight Damage and Unit Replacements

Received Wrong Indoor Unit Model

Installation, Startup, and Commissioning Technical Assistance

Your LG Manufacturer Representative

Your LG Manufacturer Representative

Your LG Manufacturer Representative

Your LG Manufacturer Representative

Your LG Manufacturer Representative

For warranty information, visit www.lghvac.com.



LG Electronics
Commercial Air Conditioning Division
4300 Northpoint Parkway
Alpharetta, Georgia 30022
www.lghvac.com

LG Customer Information Center, Commercial Products

1-888-865-3026 USA

Follow the prompts for commercial A/C products and parts.

UM_CRC1_Series_Controllers_12_20
Supersedes: UM_CRC1_Series_Controllers_12_18
UM_CRC1_Series_Controllers_05_17
UM_CRC1_Series_Controllers_3_17
UM_CRC1_Series_Controllers_10_16