12-5058-04



Touchscreen Comfort Control



Model ACONT624AS42DA User Guide



### **Features**

#### ACONT624AS42DA Features

- 24v, Z-Wave comfort control
- Remote access via smart phone, tablet, or P.C. (requires Nexia Bridge and a Nexia<sup>™</sup> Home Intelligence account).
- Interactive 4.3" black & white touchscreen
- 7 Day programmable, 4 schedules/day
- Built in humidity sensor with RH display
- Filter, maintenance, humidifier service reminders
- Remote temperature sensing option (1 indoor/1 outdoor)
- Auxiliary & compressor heat lockouts
- Dehumidification (overcooling)
- Enhanced dehumidification (cooling)
- Adjustable variable speed fan settings (pwm)
- Energy Savings Mode (ESM)
- Screen lock and guest lock
- Upgradable firmware (requires a Nexia<sup>™</sup> Home Intelligence account).
- Service test modes
- Humidifier control

## Operation

The model ACONT624AS42DAA Comfort Control provides typical operation of a forced air heating and cooling HVAC system. The ACONT624 comfort control also features a Z-Wave<sup>™</sup> module for remote control.



Normally, the Comfort Control displays the Home Screen as shown above.

ltem	Description	Notes
Clock Display	The current time is displayed in the upper left corner of the main screen. The time will blink when the clock has not been set.	See <b>TIME/DATE</b> for more information. If the control is connected to Nexia Home Intelligence the clock will be updated by the Nexia portal.
Dynamic Labels and Func- tion Control Buttons	The buttons are defined by the dynamic labels in each button. As you navigate through menus, the labels for the buttons will change.	
Setpoint Display and Setpoint Up/Down Buttons	The current heat or cool setpoint is displayed. These setpoints may be set using Nexia Home Intelligence, the Control's internal schedule, or by pressing the Set- point Up/Down buttons. Pressing the setpoint button changes the setpoint screen. The current mode is dis- played at the top of the screen. Adjust the setpoint by pressing the up or down arrows. To change setpoint mode press the MODE button.	The setpoints will push each other if they are adjusted to within the minimum heat/cool separation setting. This is normally 3 degrees.
Temperature Display	The Comfort Control displays the current temperature as sensed by the internal temperature sensor.	The internal temperature sensor can be adjusted as necessary.
Menu Button	Button used to access other Comfort Control menus	Other Comfort Control menus can be accessed by pressing the <i>MENU</i> button.
System Mode Button	Button used to change the system mode	Off: System off Heating: Heating only Cooling: Cooling only Auto: Heating/Cooling as necessary EM Heat: Indoor Heat only
Fan Mode Button	Button used to change the fan mode:	Auto: Fan on when cooling/heating is necessary On: Fan constantly on Circ: Fan on for a user-selected number of minutes per hour.
Schedule Mode Button	Button used to change the schedule mode:	Hold: System maintains the current temperature set- points. Schedules are disregarded. Run: Run the system schedule Energy Saving Mode (ESM): Temperature setpoints in ESM Setpoints are maintained.

## **User Settings**

User Settings allow the user to customize various settings on the 624 control. To access User Settings simply press the Menu button once and "User Settings" will be displayed. To enter the User Settings menu, press the Select button, then use the Next button to navigate through the options below. The default setting will be shown in brackets. After each selection press the Done button to save changes.

Thermostat			
Setting	Range	Description	
Temperature Scale	[Fahrenheit], Celsius	Select the temperature display scale	
Cooling RH Setpoint	30% - 60% [50%]	Select the desired indoor relative humidity during cooling mode. Dehu- midification must be enabled in the Installer Settings for this option to be available.	
Heating RH Setpoint	10% - 45% [40%]	Select the desired indoor relative humidity during heating mode. Humidification must be enabled in the Installer Settings for this option to be available.	
Smart Continuous Fan	Yes, [No]	If yes is selected, continuous fan mode is disabled when indoor humidity exceeds the Cooling RH Setpoint	
Continuous Fan Airflow	35% - 100% [50%]	Select the desired fan speed when the Fan Mode selected is Continuous (variable speed blower required)	
Fan Circulate On Time	1 - 59 minutes, [Off]	Select the desired amount of time the fan will cycle per hour when the Fan Mode selected is Circ	
Local Schedule Enable	[Yes], No	Select whether scheduling will be enabled or disabled	
Max Heat Setpoint	55 - [90] Degrees	Select the highest heating setpoint allowed	
Min Cooling Setpoint	[60] - 99 Degrees	Select the lowest cooling setpoint allowed	
H/C Delta	[3] - 15 Degrees	Select the minimum deadband between Heating and Cooling setpoints	
Once all selections have bee	en made, press the Done button to e	exit and return to Menu. Press Next to navigate to the next setting.	
	Energ	gy Savings Mode	
Setting	Range	Description	
ESM Heat Setpoint	55 - 90 degrees [62]	Select the desired Heating Setpoint when ESM (Energy Savings Mode) is selected	
ESM Cooling Setpoint	60 - 99 Degrees [85]	Select the desired Cooling Setpoint when ESM (Energy Savings Mode) is selected	
Once all selections have bee	en made, press the Done button to e	exit and return to Menu. Press Next to navigate to the next setting.	
		Display	
Setting	Range	Description	
Screen Timeout	[0] - 90 Seconds	Select how long after the last button press before the screen timeouts to a minimized screen	
Backlight Timeout	0 - 90 Seconds [20]	Select how long after the last button press before the backlight dims	
Backlight On Percent	0 - [100] Percent	Select the screen brightness when the backlight is lit	
Backlight Off Percent	[0] - 100 Percent	Select the screen brightness when the backlight timeout expires	
Buzzer Enable	[Yes], No	Select whether button presses are audible	
Security	[Unlocked], Display Lock, Guest Access	<ul> <li>Select security level</li> <li>Unlocked - Enables selection of all menus and settings</li> <li>Display Lock - Disables selection of all menus and settings</li> <li>Guest Access - Disables selection of all menus and settings except the following: Raise or lower heating or cooling setpoint +/- 5 degrees and change system mode</li> <li>Note: When Display Lock or Guest Lock is selected a lock icon will appear next to the up arrow.</li> <li>Note: To disable Display Lock or Guest Access, press and hold the up and down arrows until the lock icon disappears.</li> </ul>	

### **User Settings Continued**

User Settings allow the user to customize various settings on the 624 control. To access User Settings simply press the Menu button once and "User Settings" will be displayed. To enter the User Settings menu, press the Select button, then use the Next button to navigate through the options below. The default setting will be shown in brackets. After each selection press the Done button to save changes.

Time/Date				
Setting	Range Description			
Hour	1 - 12 am, 1 - 12 pm	Select the current hour of day		
Minutes	0 - 59	Select current minute of day		
Day of Week	Sun - Sat	Select current day of week		
Year	2013 - 2113	Select current year		
Month	Jan - Dec	Select current month of year		
Date	1 - 31	Select current day of month		
Once all selections have been	en made, press the Done button to e	exit and return to Menu. Press Next to navigate to the next setting.		
		Reminders		
Setting	Range	Description		
Filtration Enable	Yes, [No]	Selecting yes, enables the Filter Reminder feature		
Filter Period	[Monthly], Quarterly, Semi-Annu- ally, Annually	Select how often the reminder will be displayed		
Filter Start Month	[Jan] - Dec	Select the Filter Reminder start month		
System Maint Enable	Yes, [No]	Selecting yes enables the System Maintenance Reminder feature		
Maint Period	[Semi-Annual], Annual	Select if maintenance reminder occurs annually or semi-annually		
First Maint Month	Jan - Dec	Select the first System Maintenance month		
Second Maint Month	Jan - Dec	Select the second System Maintenance month		
Humidifier Enable	Yes, [No]	Selecting yes enables the Humidifier Maintenance Reminder feature		
Humidifier Start Month	Jan - Dec	Select the Humidifier Reminder start month		
Once all selections have been made, press the Done button to exit and return to Menu. Press Next to navigate to the next setting.				

## Scheduling

#### Schedule Setup Procedure

The 624 comfort control is preset at the factory with a 7 Day energy savings schedule. Each day of the week is pre-programmed with the following schedule:

Scheduling							
Time         Schedule Name         Heat Temperature Setting         Cool Temperature Setting							
6:00 AM	Wake	70 F	78 F				
8:00 AM	Day	62 F	85 F				
6:00 PM Evening 70 F 78 F							
10:00 PM	Night	62 F	78 F				
The schedule ma Intelligence the se	y be changed locally at the co chedule may be changed rem	ontrol with the Edit Schedule menu. If the 62 otely from the Nexia website using the webs	4 comfort control is connected to Nexia Home ite's Edit Schedule menu.				

# Scheduling

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### Edit Schedule (Local)

Press the following button sequence to edit or create an entirely new daily schedule.

		Edit Schedule
Button Press	Menu Displayed	What Needs to Be Done?
Press Menu from Home screen	USER SETTINGS	
Press Next	SCHEDULE	
Press Select	EDIT SCHEDULE	
Press Select	SELECT DAY	Continue to press "Next" until the day of week to edit is displayed.
Press Select	SET TIME	Set the start time for each of four periods for the day displayed. Use the Up/Down buttons to set the start time for the period displayed. Wake is the default period. Pressing the "Next" button three times cycles through the period displayed (Wake, Day, Evening and Night).
Press Next	HEAT SETPOINT	Use the Up/Down arrows to set the Heat set point for the period displayed
Press Next	COOL SETPOINT	Use the Up/Down arrows to set the Heat set point for the period displayed
Press Next		Continue pressing Next and using up/down arrows until all Heat & Cool set points are set for the day displayed. After editing a start time or editing the set point temperature for one or more periods press "Done" to save edits. If "Done" is not pressed edits will not be saved.
After Pressing Done	Copy Schedule is dis- played at the top of the screen. Yes and No buttons are dis- played on the right side of the screen.	Press <u>yes to copy</u> or <u>no to return to Edit Schedule menu.</u>
Press Yes to Copy	COPY "" To is displayed at the top of the screen. Yes and No buttons are displayed on the right side of the screen.	Pressing Yes will copy the day displayed to the next day in the week. If Yes is pressed five more times the scheduled will be copied to the remaining 5 days in the week. To skip over a day and avoid copying the schedule to that day press No.
Press Done	EDIT SCHEDULE menu is displayed	To return to the Home Screen press "Done" one more time.
Press Done	Home Screen is displayed	

## Scheduling

### **Copying Schedules**

Press the following button sequence to access "Copying Schedules" from the Home Screen.

Copying Schedules				
Button Press	Menu Displayed	What Needs to Be Done?		
Menu				
Next	USER SETTINGS screen			
Select	EDIT SCHEDULE screen			
Next	COPY SCHEDULE screen			
Select	COPY FROM screen (Mon)	Defaults to Monday		
Next		Advances to next day		
Back		Goes back to previous day		
Select	Copy To screen	Select the day to copy to by pressing on Yes or No buttons until the copy to day is selected.		
Press Done	COPY SCHEDULE	Continue copying one days schedule at a time to another or Press Done until the Home Screen Appears		
Press Done	SCHEDULE			
Press Done	HOME SCREEN is dis- played			
Press Done	Home Screen is displayed			
The schedule may be char Intelligence the schedule n	nged locally at the control with th nay be changed remotely from t	ne Edit Schedule menu. If the 624 comfort control is connected to Nexia Home he Nexia website using the websites Edit Schedule menu.		

### Edit Schedule (Remotely) - from Nexia Home Intelligence

Go to MyNexia.com, log into your account and select a ACONT624 comfort control from the Climate Page. Click on Edit Schedule and follow the online instructions. If you have not set up a Nexia Home Intelligence account go to MyNexia.com and click on "Get Started" to set up an account. A router and Nexia Bridge are required for remote access to the 624 control. For questions about connecting to Nexia Home Intelligence contact Nexia Home Intelligence Customer Service at 877-288-7707



### Enroll Comfort Control into existing Z-Wave Network (Nexia<sup>™</sup> Home Intelligence) Continued

#### Establish Online Connection to the Comfort Control.

Nexia Home Intelligence account must be active before continuing. See nexiahome.com for more information.

a. Remove the battery from the bridge.

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- b. Plug the Ethernet and power cord back into the bridge.
- c. Log into your account at www.mynexia.com
- d. Click the Climate tab and follow the on screen instructions.

**Note:** If the new thermostat icon remains gray or cannot be controlled remotely, you might need to add Z-wave repeaters to improve communications. Contact your local Nexia expert or call 877-288-7707 for assistance.

#### Un-enroll Comfort Control from existing Z-Wave Network (Nexia<sup>™</sup> Home Intelligence) 1 If you need to remove the 624 from a Nexia Home Intelligence account, follow the Exclusion steps. This will delete the ability to control the thermostat remotely. If you are unsure, please contact Nexia support at 877-288-7707. Install a new, high-quality 9-volt battery into the bridge. a. Hold the bridge within 6 feet (1.8 meters) of the Comfort Control throughout the entire exclusion process. After you begin the exclusion process, you have 30 seconds to complete the remainder of the steps. Study the steps below → before beginning. Press and release the minus (-) button on the bridge. b. Press the MENU button on the Comfort Control. C. d. Press NEXT button to scroll to Z-WAVE screen then press SELECT. Press the Yes button to exclude the Comfort Control. e. f

- Observe the lights on the bridge. The orange light will blink while exclusion is taking place. Exclusion is complete when the orange light becomes solid.
- → Z-Wave<sup>™</sup> controllers from various manufacturers may support the Z-Wave<sup>™</sup> Thermostat General V2 Device class used by the Z-Wave<sup>™</sup> Comfort Control. If you are using a controller that is not a Nexia bridge, consult the instructions that came with the controller to find out how to enroll a new device.

### **Firmware Upgrades**

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Firmware Upgrades allow the user to update the 624 control. Upgrades may take up to 45 minutes. The system operation will be maintained during the upgrade process. To access the Firmware Upgrades navigate to mynexia.com and look for the Edit Home screen button. The Edit Home screen button is located about mid way own the Nexia Home Page.

		1			
Viewing: QA2 Home				June 17,	2013 12:30pm
Sham Photo	Dashboard				
SECURITY &	➤ Subscriber News				
SENSORS	New Nexia Features and Function	onality:	New Nexia Au	itomation Fu	nctionality:
VIDEO	Our latest release includes more intuit features for your Nexia system includ * Video: All cameras and videos are r	tive and flexible ling: now under one tab	Scenes and Sche under one Auto include:	dules are now mation tab. No	combined ew capabilities
	* Lock codes: On all Schlage locks yo ability to add a user code to multiple time	u now have the locks at the same	* Ability to star	o set up simple ons t an automated	or complex
	* Alerts: Create, manage, and custon My Alerts tab	* Easier to creat automations	* Easier to create delayed actions for automations		
	➤ My Homes		🗙 Recent B	vents	
	Q42 Home 90211		Device	Event	Date/Time
	Now V	/iewing	Garage Entry Deadbolt	Unlocked	17/Jun/201 07:34 am
	Edit H	ome	Front Entry Light	Turned off	17/Jun/201 05:59 am
	Derau	It Home	Front Entry Light Off	Activated automation	17/Jun/201 05:59 am
	1		Garage Entry Light	Turned off	17/Jun/201 12:02 am
			Backyard Patio Light	Turned off	17/Jun/201 12:02 am
			Garage Entry Light Off	Activated automation	17/Jun/201 12:01 am
			Backyard Patio Light Off	Activated automation	17/Jun/2013 12:01 am
	0.000		Garana Entry	Indead	16/h.m/3013
	Add nome				

a. On the Edit Home, Firrmware Updates page, the 624 will appear. If a firmware update is available an"Update Firmware" button will appear.

Welcome mkateley   Logout				View Home	QA2 Home	(Edit Home)
		_				
		Dashboard	Automation	Event History	My Alerts	My Account
Viewing: QA2 Home					June 11,	2013 10:15am EDT
Show Photo	Edit Home					
SECURITY &	Home Informatio	n Firmware Updat	es 🔀 Advanced			
SENSORS	Bridge Firmware	e				
VIDEO	Firmware Version: 001.027.003					
	Device Firmwar	e				
	AmStd 624 - Firmware Ver	- 6.39 sion: 0.5	Update Fir	rmware		
SCHLAGE © 2012 Schlage Privacy	Policy   Terms and Condit	ions		Subscriber Community	Where to Buy   Co	ontact Nexia™   Help 👔

<image/>	b. When the connect to the c	e user selects the "Update Firmware" button an "Update Firmware" dialog will appear. The dialog will first levice and then it will display the firmware update progress.
<ul> <li>c. After the firmware has been downloaded it is then applied to the ACONT624.</li> <li>Update firmware</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Estimated time remaining: 0 minute.</li> <li>Imma update 100% condets. Imma update about 00 econds.</li> <li>Imma update 100% condets. Imma update about 00 econds.</li> <li>Imma update about 10 dovice. (This process will take about 00 econds.</li> <li>Imma update about 10 dovice. (This process will take about 00 econds.</li> <li>Imma update about 10 dovice. (This process will take about 00 econds.</li> <li>Imma update about 10 dovice. (This process will take about 00 econds.</li></ul>		Update Firmware ✓ Connecting to device ☆ Firmware update 0% complete. Estimated time remaining: 45 minutes. Cancel
<ul> <li>Update introverse</li> <li></li></ul>	c. After the	firmware has been downloaded it is then applied to the ACONT624.
<ul> <li>d. The portal retrieves version information from the ACONT624.</li> <li>Update Firmware <ul> <li>Connecting to device</li> <li>Firmware update 100% complete. Estimated time remaining: 0 minutes.</li> <li>Applying new firmware version to device. (This process will take about 50 seconds.)</li> <li>Petrieving new version information.</li> </ul> </li> <li>e. Finally the user is shown that the firmware was updated successfully</li> <li>Update Firmware <ul> <li>Connecting to device</li> <li>Connecting to device</li> <li>Connecting to device</li> <li>Connecting to device</li> <li>Petrieving new version to device. (This process will take about 50 seconds.)</li> <li>Pinware update 100% complete. Estimated time remaining: 0 minutes.</li> <li>Applying new firmware version to device. (This process will take about 50 seconds.)</li> <li>Firmware update 100% complete. Estimated time remaining: 0 minutes.</li> <li>Applying new firmware version to device. (This process will take about 50 seconds.)</li> <li>Pinware update successful.</li> </ul> </li> </ul>		Update Firmware ✓ Connecting to device ✓ Firmware update 100% complete. Estimated time remaining: 0 minutes. ♣ Applying new firmware version to device. (This process will take about 90 seconds.)
Update Firmware <ul> <li>Connecting to device</li></ul>	d. The porta	al retrieves version information from the ACONT624.
<ul> <li>e. Finally the user is shown that the firmware was updated successfully</li> <li>Update Firmware</li> <li>Connecting to device</li> <li>Connecting to device</li> <li>Firmware update 100% complete. Estimated time remaining: 0 minutes.</li> <li>Applying new firmware version to device. (This process will take about 90 seconds.)</li> <li>Retrieving new version information.</li> <li>Firmware update successful.</li> </ul>		Update Firmware
Update Firmware         ✓ Connecting to device         ✓ Firmware update 100% complete. Estimated time remaining: 0 minutes.         ✓ Applying new firmware version to device. (This process will take about 90 seconds.)         ✓ Retrieving new version information.         ✓ Firmware update successful.	e. Finally th	e user is shown that the firmware was updated successfully
OK		Update Firmware  Connecting to device  Firmware update 100% complete. Estimated time remaining: 0 minutes.  Applying new firmware version to device. (This process will take about 90 seconds.)  Retrieving new version information.  Firmware update successful.
		OK

# About

About			
Setting	Range		
Version	Current firmware version loaded on the control		
ZWAVE Ver	Current version of the ZWAVE firmware		
Node - ID	ZWAVE identification for this device		
Home - ID	ZWAVE identification for the connected ZWAVE network		
Out - Type	Identifies the type of outdoor unit installed		
С/О - Туре	Indicates whether the switchover valve (SOV) is energized in cooling or heating mode		
In - Type	Identifies the type of indoor unit installed		
Once all selections have been made, press the Done button to exit and return to Menu. Press Next to navigate to the next setting.			

## **Clean Screen**

Clean Screen				
Setting Range Description				
Clean Screen	Yes, No	Selecting yes allows the user to clean the screen without activating any of the onscreen touch points. Use only water and a soft cloth, no harmful chemicals.		
Once all selections have been made, press the Done button to exit and return to Menu. Press Next to navigate to the next setting.				

### **FCC Notice**

#### FCC ID WIBTZW012

#### INFORMATION TO USER

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- · Reorient or relocate the receiving antenna
- · Increase the separation between the equipment and receiver
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- · Consult the dealer or an experienced radio/TV technician for help

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **IC Notice**

#### IC 9374A-XR624

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio

exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne

doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage

radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



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American Standard Heating & Air Conditioning has a policy of continuous product and product data improvement and it reserves the right to change design and specifications without notice.