

Aprilaire Wi-Fi 8800 Series Integration Release Notes

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Last modified: 11/05/20

Introduction

The Aprilaire Wi-Fi thermostats are a series of Wi-Fi thermostats that have been tested and certified for integration with the ClareHome system.

When integrating an Aprilaire Wi-Fi thermostat into your ClareHome project, no extra connections are necessary. Install the thermostat per the Aprilaire documentation, access the thermostat using the IP address, configure the thermostats settings, and then connect it to the network using IP.

All HVAC integrations share a common UI, so that the user experience is consistent. Temperature settings are controlled via events. Use Fusion's Scenes and Rules to automate the actions your customers want.

Note: The Aprilaire thermostats are programmed with a default schedule. This schedule can interfere with ClareHome and Fusion configuration. Disable the default schedule to allow greater customer access and control. Follow the integration notes below.

Supported models:

- 8810 8830
- 8820 8840

The Following figure shows the Aprilaire 8810 controls on the ClareHome UI.



Figure 1: Temperature mode showing temperature set points

- (1) Temperature setting displays on the ClareHome UI in Fahrenheit.
- (2) Change the Heat set point by tapping the up/down arrow.
- (3) Change the Cool set point by tapping the up/down arrow.
- (4) Change the Operation mode by tapping the desired radio button.
- (5) Change the Fan mode by tapping the desired radio button.

Installing the Aprilaire thermostat

A qualified HVAC installation technician should install the Aprilaire thermostat. Refer to the documentation that came with the thermostat for detailed installation instructions. Clare Controls does not assume any responsibility for damages caused by improper installation or connection to the data network.

Connecting to ClareHome

After installation, you must connect the thermostat to Wi-Fi, enable auto changeover, disable the thermostat's default schedule, and verify the thermostat is set to automation system. This allows the thermostat to be accessed remotely and updated with information from the ClareHome App.

Note: The thermostat is set to Automation System by default. If it is no longer set to Automation System, the thermostat will not connect to ClareHome.

To connect the Aprilaire thermostat to Wi-Fi and set a static IP address:

Note: When the Aprilaire Wi-Fi thermostat is powered on, it broadcasts its own Wi-Fi.

1. Use a laptop device to connect to the Aprilaire's Wi-Fi.

Note: The Wi-Fi appears as APRILAIREXXXXOOOOOO. The X's are replaced with the model number and the O's are replaced with the last 6 characters of the MAC address. For example, if you are using an Aprilaire Wi-Fi 8830 with the MAC address AA:F4:E6:B1:22, the Wi-Fi network is APRILAIRE8830E6B122.

2. Browse to http://192.168.1.99/index.html to access the thermostat's web interface.

Select a network for the thermostat to connect to:
SSID Security Type Signal Strength Select
Clare Controls WPA-Personal 🛜 Click here
Aprilaire WPA-Personal 🔶 Click here
Home WPA-Personal 🔶 Click here
Public WPA-Personal 🔶 Click here
Clare Guest WPA-Personal 奈 Click here

Aprilaire

3. Click **Click here** next to your home's wireless network.

4. Enter the password, and then select the Advanced Options check-box.

Aprilaire					
			Thermostat Model	Thermostat MAC B4 82 55 50 08 D9	
	Configure wireless and network settings SBID Clare Security WPA-Personal Password Brow Passed	Enter password for selected netw	wrk:		
Advanced Option	L	Back Same and Apply			
		Version 1.2.6 - 2015 © Aprilaire	1.		

5. Enter the Static IP address settings.

Note: Using a static IP address ensures consistent operation and communication with the device.

Aprilaire					
		Thermostat Model 8620	Thermostat MAC B4 82:55 50 06 D9		
	Configure wireless and network settings	Enter password for selected network:			
	SSID Clare Security WPA-Personal				
	Password Show Password				
김 Advanced Option ● Acquire IP address automatically (DHCP)					
 Static IP Address Configuration 	Static IP Address Configuration IP Address				
	Subnet Mask				
	DNS Server	Back. Save and Apply			
		Version 1.2.6 - 2015 © Aprilaire.			

6. Click Save and Apply.

The Aprilaire settings are saved.

Enabling auto-changeover and automation mode

Enable auto-changeover and automation mode to allow the thermostat to automatically switch between heat and cool modes. Once auto-changeover is enabled, the thermostat reboots.

To enable auto-changeover and automation mode in the Aprilaire 8810 Wi-Fi thermostat:

Note: Verify that the Thermostat Mode is set to off prior to changing the schedule settings. To do this, tap **Mode** until the thermostat displays off.

- 1. Press and hold the thermostat's **Mode** and **Up** buttons until the displayed screen changes.
- 2. Press Mode until you reach option 12.
- 3. Press the up/down arrow to toggle to 1.
- 4. Press **Mode** until **Done** displays.
- 5. Press and hold the thermostat's **Mode** and **Up** buttons until the displayed screen changes.
- 6. Press **Mode** to reach option 00.
- 7. Press the up/down arrow to toggle to 1.
- 8. Press **Mode** until **Done** displays.

To enable auto changeover and automation mode in the Aprilaire 8820 and 8830 Wi-Fi thermostats:

- 1. Access the thermostat, and then press **Mode** to set the thermostat to off.
- Press Menu, and then press and hold Setup until the screen changes. The thermostat displays Installer Mode Enabled.
- 3. Press **Installer Setup** to enter the menu, and then press the right **Next** arrow to select the menu option.
- 4. Verify that the first menu item, 00, is set to Automation System.
- 5. Use the up and down arrows to select option 12, and then press the up/down arrow to enable Auto Changeover.
- 6. Press Done to save,
- 7. and press it a second time to exit the menu.

Note: If the project is already deployed with the thermostat configured, you must redeploy the project for ClareHome to connect to the thermostat.

To enable auto changeover in the Aprilaire 8840 Wi-Fi thermostat:

- 1. Access the thermostat, and then press Menu.
- Press and hold **Contractor Info** until the screen changes (about 10 seconds).
 The thermostat displays the Installer Mode box, and then reboots.
- 3. Press Thermostat (Heat Cool).
- 4. Press **Next** until the auto-changeover options displays, use the up/down button to enable it.
- Press Next until the menu screen displays, and then press Done to save. The thermostat reboots.

Disabling the thermostat's default schedule

After you have enabled auto-changeover, disable the thermostat's default schedule. Disabling the thermostat's schedule allows the ClareHome and Fusion configured schedules to operate correctly.

To disable the Aprilaire 8810 Wi-Fi thermostat's default schedule:

Note: Verify that the Thermostat Mode is set to off prior to changing the schedule settings. To do this, tap **Mode** until the thermostat displays off.

- 1. Press and hold the thermostat's **Mode** and **Up** buttons until the displayed screen changes.
- 2. Press Mode until you reach option 41.
- 3. Press the up/down arrow to toggle to 1.
- 4. Press Mode until Done displays.

To disable the Aprilaire 8820 and 8830 Wi-Fi thermostat's default schedule:

- 1. Press Menu, and then press Setup.
- 2. Press **Next** until Program Format displays.
- 3. Press the up/down arrow to change the setting to **non-prog**.
- 4. Press Done to save.

You are returned to the main screen.

To disable the Aprilaire 8840 Wi-Fi thermostat's default schedule:

- 1. Tap Menu, and then User Preferences.
- 2. Tap Schedule Settings, and then select Off.
- 3. Tap **Done** to save.

You are returned to the main screen.

Configuring in Fusion

Once the thermostat has been installed, connected to Wi-Fi, and set to auto changeover, configure the Aprilaire thermostat in Fusion.

To add the Aprilaire Wi-Fi device in Fusion:

- 1. Click the **Devices** tab, and then click the **New Device** button ⁽²⁾ to display the Select Template dialog.
- 2. Expand the **Climate** folder, and then browse to the Aprilaire Wi-Fi Thermostats.

```
Climate > IP Thermostats > Aprilaire Wi-Fi Thermostats (IP)
```

Select Template		\otimes
Device Templates		
type filter text		
Access		
Climate		
IP Thermostats		
Aprilaire 8810 - No Humidistat		
Aprilaire 8820 8830 (IP)		=
Aprilaire HVAC Controller		
Carrier - Infinity [Dynamic]		
Clare Controls - TW-Humidity Series		
HAI - Omnistat 2 - RC-2000 - Humidistat		
Honeywell - WiFi Thermostats (IP)		
Nest Learning (Cloud)		
Tekmar tN4 Gateway 482 (Serial)		
7-Wave Thermostats		
Finite Forter and the provides		
Fintertainment IR		
Fintertainment Serial Devices		
		•
Communication Method: Other		
OK	Cance	1

Note: If the home is not using the humidistat, we recommend using the Aprilaire 8810 template. This presents the user with accurate functional UI options, removing the unused humidistat options.

3. Click OK.

The **Details** tab displays.

💄 *Aprilaire Wi-Fi	×	
		÷
Details Configure	Test	
Icon:	8	A
Name:	Aprilaire Wi-Fi Den Thermostat	
Manufacturer:	Aprilaire	
Model Number:	8820 8830	∣≡
Master Template:	Aprilaire 8820 8830 (IP) Change Device Template	
Types:	IP Thermostats	
Notes:	Thermostat Needs to be set to Home Automation in the Installer Menu	
Version:	1.0.0	•

- 4. Enter a name and notes for the thermostat.
- 5. Click the **Configure** tab.
- 6. Enter values in the following fields:
 - **Thermostat ID**: Enter the thermostat number associated with that thermostat.

Note: Fusion sets the Thermostat ID to 1 by default. This number only needs to be changed if there is more than one thermostat in use. We recommend assigning the thermostats IDs in order. The first thermostat added is 1, the second thermostat is 2, and so on.

- Network Address: The static IP address of the Aprilaire thermostat set in the Wi-Fi setup process.
- **Network Port**: The port used by the thermostat. Do not change the port number.

🔋 *Aprilaire Wi-Fi Den Th	ermostat 🔀		- E
Details Configure Test			
Configuration Proper	ties		
Name	Value	Mandatory	Description
⊿ General			
Thermostat ID	1	yes	This device property is used by function groups that need a
A Network Controller			
Network Address	172.20.30.54	no	This is a device configuration property used by ALL HDM ada
Network Port	8000	no	This is a device configuration property used by ALL HDM ada

7. Click the **Save** button \blacksquare .

8. The Create Service dialog displays. Click **OK**, the service is automatically created for you.

Note: Select Open Wizard to check or change the controls points.

Create Service			\otimes
Service Name:			
Aprilaire Wi-Fi Den Thermos	tat		
	OK	Cancel	Open Wizard

9. Configure rules to work with your thermostat.

Configuring rules with the Aprilaire Wi-Fi thermostats

Configure a rule for your thermostat. The example below shows how to set a rule alerting the customer of the home's temperature. If the thermostat reaches above 72°F, an email notification is sent.

To create a rule for the Aprilaire thermostat in Fusion:

1. Access your project, and then click the **Rules** tab.

🏽 Setup 📼 Devices 🕄 Services 🎬 Scenes 🔃 Rules 🖾 Troubles	hooting 🗖 🗖
	S 🖸 🔁
type filter text	T
Cood Morning	Rule
🕎 Good Night	Rule

- 2. Click the **New Rule** button 😳.
- 3. Enter a name for the rule, and then select the Enable Rule checkbox.

🕛 *Rule_	1 🗙		• 🗖
Rule I	nfo		7
Name:	Its getting warm!	🗹 Enabled	

- 4. Configure the Event Part as below.
 - Event Type: Device Property Change Event
 - **Device:** Apirlaire WiFi thermostat
 - Function: Heat Cool Temperature Actuator
 - **Property:** Unit
 - Constraint: >
 - Value: 72

Event Part		
Event Type:	Device Property Change Event	•
Device:	- Aprilaire Wi-Fi thermostats - Den	
Function:	Heat Cool Temperature Actuator	•
Property:	Unit	•
Constraint:	>	Ψ.
Value:	72	

- 5. Configure the Action part as below.
 - Action Type: Send Email
 - Recipients: The homeowner's Email address

Note: To add an Email address, click the green plus icon Θ . Do this for each desired Email recipient.

- **Subject:** The purpose of the alarm
- Text: The information included in the email

Action Par	t			
Action Type	e: Send Email			ļ
Recipier	its	0	0	
Tivan@o	gmail.com			
Subject:	It's getting warm!			
? Text:	The thermostat has reached above 72. You may want to turn on the AC.			

6. Click the **Save** button \blacksquare , and then deploy the project.

Contact information

Clare Controls, LLC. 7519 Pennsylvania Ave, Suite 104 Sarasota, FL 34243

General: 941.328.3991 Fax: 941.870.9646 www.clarecontrols.com

Integrator/Dealer Support: 941.404.1072 claresupport@clarecontrols.com

Homeowner Support (ClareCare): 941.315.2273 (CARE) help@clarecontrols.com