# Aprilaire Wi-Fi Automation Thermostats with IAQ Control





### **OPTIMAL IAQ**

Exclusive features for ultimate control of indoor air quality — temperature, humidity, air purity and fresh air ventilation all from a single mobile app

### **RELIABLE HVAC**

Communicate through LAN vs. Cloud for continuous HVAC operation regardless of Wi-Fi or internet status or software upgrades

### **WORRY FREE**

Experts in HVAC with a nationwide network of pro contractors and tech support

### **FLEXIBLE**

Works with all Automation systems

### **PROFITABLE**

Priced for higher profit margins



Answer the Growing Demand for Smart HVAC



# Aprilaire Wi-Fi Automation Thermostats

For over 75 years Aprilaire, a division of Research Products Corporation, has been committed to the HVAC channel. As the leader in indoor air quality products, Aprilaire provides solutions for health, comfort, protection and energy savings. Our line of Wi-Fi Automation thermostats continues that tradition.

Clean and simple, the Aprilaire Wi-Fi Thermostat App has intuitive temperature control designed to easily and effectively deliver comfort and energy savings.

Aprilaire thermostats also offers Wi-Fi IAQ Control; the ability to balance all aspects of indoor air quality including temperature, humidity, air purity and fresh air all from one simple mobile app.

# What to Look for in Wi-Fi Automation Thermostats

System integrators today are introducing improved temperature and Indoor Air Quality (IAQ) solutions to the automation channel. As this requirement becomes much more prevalent, there are important features and attributes to consider.

# Designed by an HVAC Company for HVAC Control

When choosing a thermostat, select a brand that is known in the HVAC industry and has a long history of innovation and success. As leaders in IAQ within the HVAC channel, Aprilaire designs its thermostats to ensure reliable control of the HVAC and IAQ systems, and protect them from extreme conditions. World-class, domestic tech support will help you partner with the pros in HVAC to deliver the peace of mind knowing that the controls installed best fit the application of each of your clients' homes.

# Stand-alone Operation

A thermostat needs to control the HVAC system at all times.

When a firmware upgrade is pushed to an Aprilaire thermostat, no changes will be made to how the thermostat controls the



heating and cooling system. All custom settings are maintained (type of HVAC system, mode of operation, program).

# Local Internal Network Communication

Aprilaire thermostats communicate directly to your automation system so you can rest assured the HVAC systems continue to operate regardless of the status of the internet connection or local network.

# Works with All Control Companies

Aprilaire Automation Thermostats support virtually all control systems, making any potential system transitions smooth and painless.

# **Product Portfolio**

# IAQ Control

Offer your customers the ability to control all configurations of heating/cooling and IAQ accessories including humidifier, dehumidifier, air cleaner and ventilator. All installed products are conveniently controlled from one app.

	8810	8820 <sup>2</sup>	8830 <sup>2</sup>	8840 <sup>2</sup>
Temperature	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	<b>②</b>
Air Cleaning	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>	$\odot$
Humidity		<b>⊘</b> ¹	<b>⊘</b>	<b>⊘</b>
Fresh Air		<b>⊘</b> ¹	<b>⊘</b>	<b>⊘</b>

<sup>&</sup>lt;sup>1</sup> Controls either humidity or fresh air ventilation with only one relay.

<sup>&</sup>lt;sup>2</sup> App automatically configures; removing functionality if removed from the thermostat.



# Model 8840 IAQ Control

Industry's first color touch screen with all control options on the home screen.

- + Universal 3H/3C or 4H/2C HP
- + Event-Based™ Air Cleaning
- + Humidity and Ventilation
- + 2 Part 3-Wire design
- + Wi-Fi with full color touch screen



# Model 8830 IAQ Control

Easy-to-use touch screen with all control options on the home screen.

- + Universal 3H/3C or 4H/2C HP
- + Event-Based™ Air Cleaning
- + Humidity and Ventilation
- + 2 Part 3-Wire design
- + Wi-Fi touch screen



### **Model 8820**

Easy to use touch screen designed for temperature and humidity control.

- + Universal 2H/2C or 4H/2C HP
- + Event-Based™ Air Cleaning
- + Humidity or Ventilation
- + Wi-Fi touch screen



# **Model 8810**

Temperature control.

- + Universal 2H/2C or 4H/2C HP
- + Event-Based™ Air Cleaning
- + Wi-Fi



### **Model 8800**

Temperature control.

- + Universal 2H/2C or 4H/2C HP
- + Dual Fuel with Balance Points (HP Mode Only)
- + Temperature or Humidity Control (with 8082 External Sensor)
- + Touch screen
- + Serial Communications to Automation System

# Aprilaire Wi-Fi IAQ Control – Temperature,

Aprilaire Wi-Fi IAQ Control is an industry-leading design focused on consumer usability; providing users information when and where it's needed. Options can be selected that automatically control the indoor environment based on the needs of each individual consumer's home and family. When events occur in the home that affect indoor air quality, Aprilaire exclusive Event-Based™ control options make managing and improving the air quality simple.





# Industry-exclusive Features

- + Ability to control temperature and all IAQ equipment
- + Event-Based™ Air Cleaning and Fresh Air Ventilation
- + Automatic humidifier control with accurate ODT control points
- + Automatic dehumidifier control
- + Temperature overrides for instant comfort ("Heat Blast") and maximum energy savings ("Away")
- + All screens display the status of all IAQ and HVAC equipment
- + 3-Day weather forecast with pollen and mold levels
- + Features disabled from thermostat are automatically removed from the app
- + Informs homeowners on the benefits of IAQ control
- + "Product Not Installed" screen suggests additional IAQ products
- + Easy to identify and access "Help" screens ?



### + Easy-to-access navigation

The navigation bar showing all control options and status of equipment (on, off, idle) is visible from any screen. When first entering the app, the screen will always default to temperature.

# **Temperature**

Not only do Wi-Fi thermostats give your customers the ability to modify their home's temperature from any mobile device, the Aprilaire scheduling and program

over-ride provide the usability needed to save money without sacrificing comfort.

# Air Purity, Humidity, Fresh Air Ventilation



# Air Purity

The air customers breathe inside their homes can be the most polluted air they breathe all day. People who suffer from asthma and allergies will benefit from the ability to control air cleaning—especially with the unmatched simplicity of Aprilaire's exclusive Event-Based™ Air Cleaning feature.



Aprilaire 3-day weather forecast includes pollen and mold conditions to provide the information needed to determine when air cleaning is necessary.



# Humidity

Too much or too little humidity can play a big role in your customers' comfort and health. Having the ability to verify and control humidity is required by many consumers.

# **Automatic Humidifier Control**

Continuously monitors outdoor temperature while automatically adjusting the humidifier to provide optimum RH levels inside the home. Manual control is also available, if needed.

# Automatic Dehumidifier Control

Automatically turns on a dedicated dehumidifier based on relative humidity. It couldn't be any simpler.



# Fresh Air Ventilation

Fresh air ventilated from the outside is required in many new homes. That's why Aprilaire controls are designed to meet all ASHRAE 62.2-2010 requirements. Simply set the parameters and the control will ventilate the proper amount of air. Event-Based™ is also available for customers who want additional fresh air for circumstances such as cooking or parties.

# Wi-Fi Connection That's Simple, Safe & Secure



Setup with your customer's home network is simple and secure, with the app being setup and controlled by the customer—not you. Aprilaire also provides setup support via phone at 1-800-545-2219 or online at My.Aprilaire.com. For automation support, call 1-888-782-8638.

- 1 DOWNLOAD the Aprilaire Wi-Fi Thermostat App.
- 2 REGISTER your Aprilaire user account.
- 3 CONNECT the Wi-Fi thermostat to your home network.



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All communication between your customers' device and your customers' thermostat uses industry standard TLS (Transport Layer Security) 256 bit encryption.

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We only store personal data on our database servers. We use Amazon Web Services (AWS) to host our database servers. We will not share personal data with any third parties. We may use only non-personal data internally for analyzing overall usage of the app and equipment.

# Controls Designed for HVAC Contractors and Their Customers

# Free Custom Imprinting

Aprilaire offers free imprinting of system integrator or HVAC contractor's logo on all battery covers to keep their business top of mind, for whenever HVAC needs should arise.

- - - 1.75" x 0.625" Imprint Area
 Imprint not available on Model 8840. Contractor information shows on screen.



# Proud Partners with These Top Integration Specialists

































# Industry's most complete line of thermostats >

8820

8800

	Screen Type	Backlit LCD	Backlit LCD	Backlit LCD	Backlit LCD	HD Color LCD
	Control Type	Touchscreen	Hard Button	Touchscreen	Touchscreen	Touchscreen
USER INTERFACE	Clock & Date Display (with Daylight Savings Adjustment)	•	•	•	•	•
	Adjustable Backlight Intensity	•		•	•	•
	Lockouts (Full, Timed, Limited)	FTL		ET,L	F,T,L	ET,L
	Automation Control Protocol	RS-485 (or RS-232)	Wi-Fi	Wi-Fi	Wi-Fi	Wi-Fi
COMMUNICATION	Cloud-based Control Protocol			Choose Cloud-based -or-	Choose Cloud-based -or- Automation (LAN) mode	
	Universal HVAC Control		"2H/2 Conv, 4H/2C HP"		"3H/3 Con	"3H/3 Conv, 4H/2C HP"
	Outdoor Temperature measurement and display	•	•	•	•	•
	Displays Outdoor Temperature and Humidity with Optional 8056				•	•
	Programmable	•	•	•	•	•
	Programmable Events Per Day	4 or 2	4	4	4	4
	Message Center with Real Language Set-up (allows display of custom messages from control system. For example "Kitchen")	•		•	•	•
TEMPERATURE	sploH	•	•	•	•	•
CONTROL	1/2 Degree Celsius Display and Control		•	•	•	•
	Auto Changeover with Deadband Adjustment (Both Heat & Cool Setpoints)	•	•	•	•	•
	Adjustable Differential (Allowed temperature drop between heat/Cool stages)	•	•	•	•	•
	Stage Rate (Engage additional stages to achieve setpoint)	•	•	•	•	•
	Progressive Recovery (Early start to meet setpoint at start of event)	•	•	•	•	•
	Heat Blast™ (Temporary heat boost button)			•	•	•
	Dual Fuel Kit (Allows switching between two equipment types)	•	•	•	•	•
	Balance Point Control (Allows optimization of heat pumps and Aux heat)	•	•	•	•	•
AIR CLEANING	Event-based™ Air Cleaning (On, Circ, 3hr & 24 Hour events)		•	•	•	•
HUMIDIFIER CONTROL	Automatic or Manual Control			•	•	•
DEHUMIDIFIER CONTROL	Whole Home Dehumidifier			•	•	•
DEHUMIDIFY W/AC	Controls dehumidifier on Air Conditioner to dehumidify			•	•	•
	Timed ventilation			•	•	•
	ASHRAE set up			•	•	•
VENTICAL	Temperature and Humidity Limits			•	•	•
	Notifies when active			•	•	•
	Wireless Outdoor Temperature / Humidity Sensor option (8056)				•	•
	Remote sensing via Support Modules (8081 & 8082)	•		•	•	•
	Monitor Temperature and Humidity via Support Modules	•		•	•	•
CONFIGURATION	Wi-Fi enrollment method		WAP Mode	WAP Mode	WAP Mode	WAP or Direct Entry
	All Power - 24 VAC	•	•	•	•	•
	Battery Backup	•				
	Two-part design — 3 wires to living space				•	•
WARRANTY	Warranty			5-Year Warranty		
	Installer Test Mode	•	•	•	•	•
SERVICE	Reminders (Service, Water Panel, Dehumidifier, Air Cleaner, Ventilation)	S,W,D,A	W,A	S,W,D,A,V	S,W,D,A,V	S,W,D,A,V
	Return Air Temperature & Leaving Air Temperature sensors				•	•