



# Wireless Outdoor Temperature and Humidity Sensor Accessory



## Model 8056

Wireless Outdoor Temperature  
and Humidity Sensor Accessory for the  
Model 8910 Home Comfort Control™

# Installation and Operator's Manual

**READ AND SAVE THESE INSTRUCTIONS**

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## FEATURES

**In heat pump mode the Wireless Outdoor Sensor can be used to efficiently utilize an air source heat pump.**

- When the outdoor temperature is less than the Low Balance Point, the heat pump will be locked out and only auxiliary heating will be used.
- When the outdoor temperature is higher than the High Balance Point, the auxiliary heating will be locked out and only heat pump will be used to provide heating.

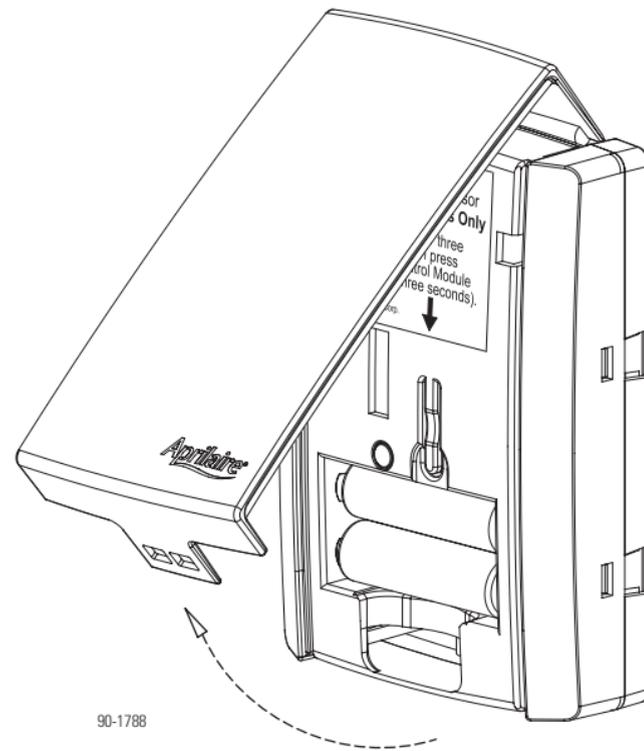
**Indoor Air Quality functions can use the Wireless Outdoor Sensor.**

- Control humidification setpoint based on outdoor temperature to prevent condensation.
- Lock out humidification for temperatures over 60°F or below -30°F.
- Lock out ventilation based on high and/or low outdoor temperatures.
- Display outdoor temperature and humidity on thermostat.

## INSTALL BATTERIES INTO WIRELESS OUTDOOR SENSOR

1. Remove the cover of Wireless Outdoor Sensor to access battery compartment. See **Figure 1**.
2. Install two fresh Lithium AA sized batteries. Batteries included.
3. Replace cover.

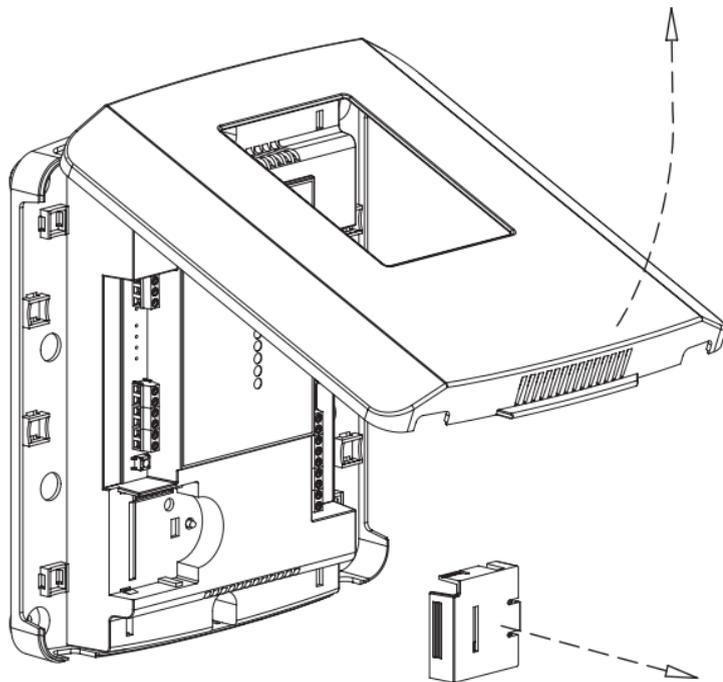
**FIGURE 1**



## INSTALLATION OF WIRELESS MODULE INTO 8910 EQUIPMENT CONTROL MODULE

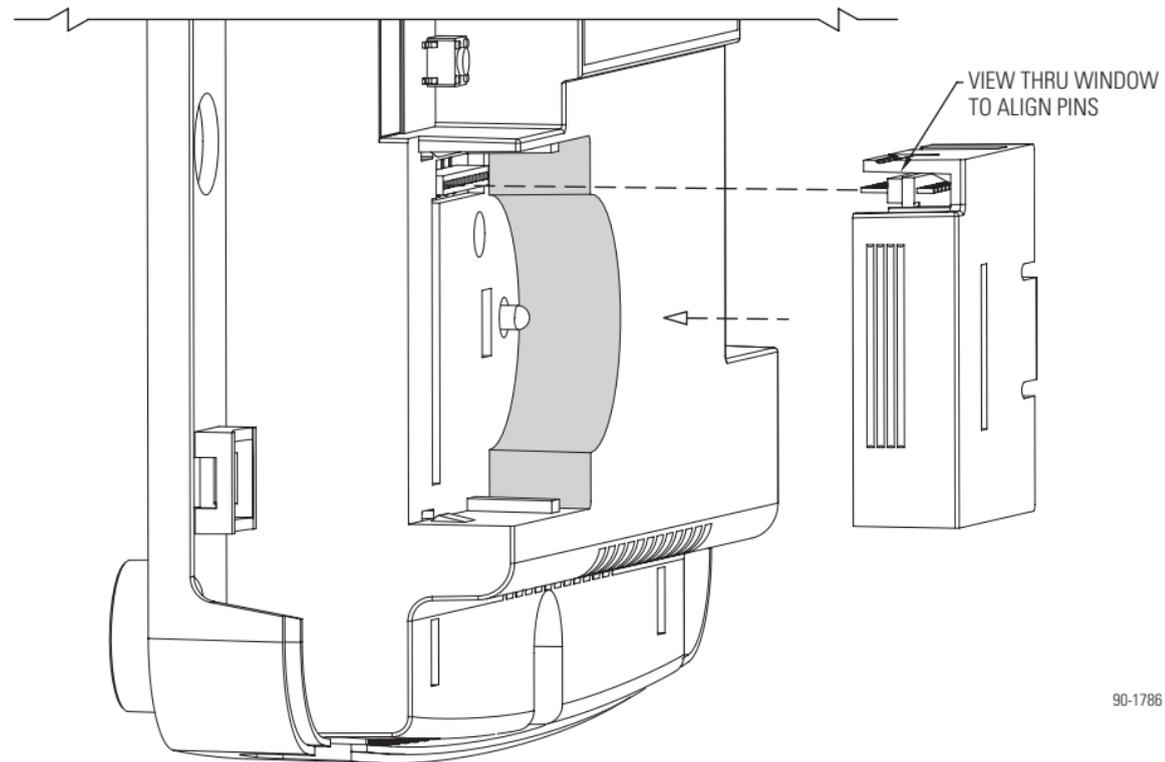
1. Disconnect power to 8910 Equipment Control Module.
2. Remove cover from 8910 Equipment Control Module.
3. Remove and discard 8910 Equipment Control Module wireless slot cover. See **Figure 2**.
4. Insert Wireless Module into 8910 Equipment Control Module. See **Figure 3**.
5. Replace cover on 8910 Equipment Control Module.
6. Reconnect power to the 8910 Equipment Control Module.

**FIGURE 2**



90-1785

**FIGURE 3**



90-1786

## HOW TO LINK WIRELESS OUTDOOR SENSOR

1. Remove the cover of Wireless Outdoor Sensor and 8910 Equipment Control Module.
2. Press and hold the link button on the Wireless Outdoor Sensor for 3 seconds, the green LED will begin to flash slowly. See **Figure 4**. The Sensor is now in linking mode and will wait 5 minutes for a linking signal.
3. Now press and hold the link button on the 8910 Equipment Control Module for 3 seconds (see **Figure 5**), both green LEDs on the sensor and control module will begin to flash rapidly indicating the units are in the process of linking. Then both green LEDs will go solid for 2 minutes then off. The modules are now linked.

**Note:** If the 8910 does not already have the outdoor sensor enabled you will need to enable by setting system setting #11 OUTDOOR SENSOR of the Installer system settings to YES at the 8910 user interface.

**Note:** If a wired outdoor sensor is already installed, the wireless outdoor sensor will take priority. If a wireless outdoor sensor error occurs, the 8910 will display the corresponding error and revert to the wired outdoor sensor reading.

FIGURE 4

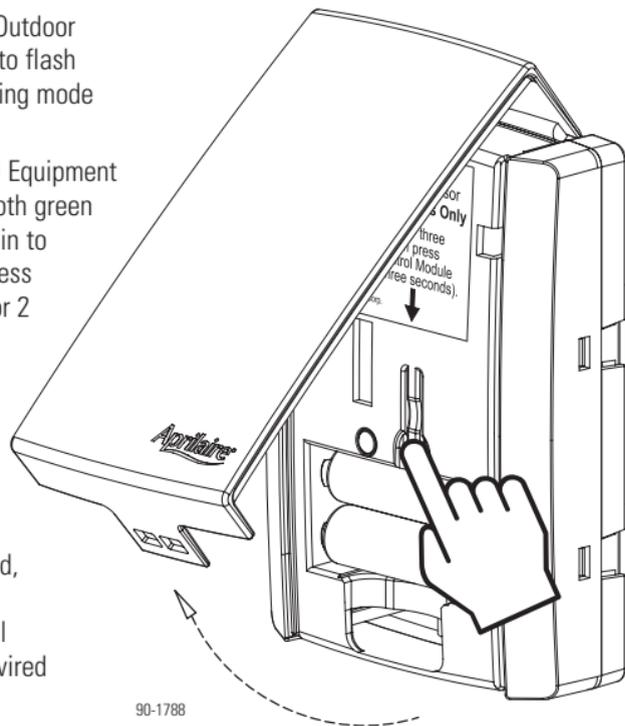
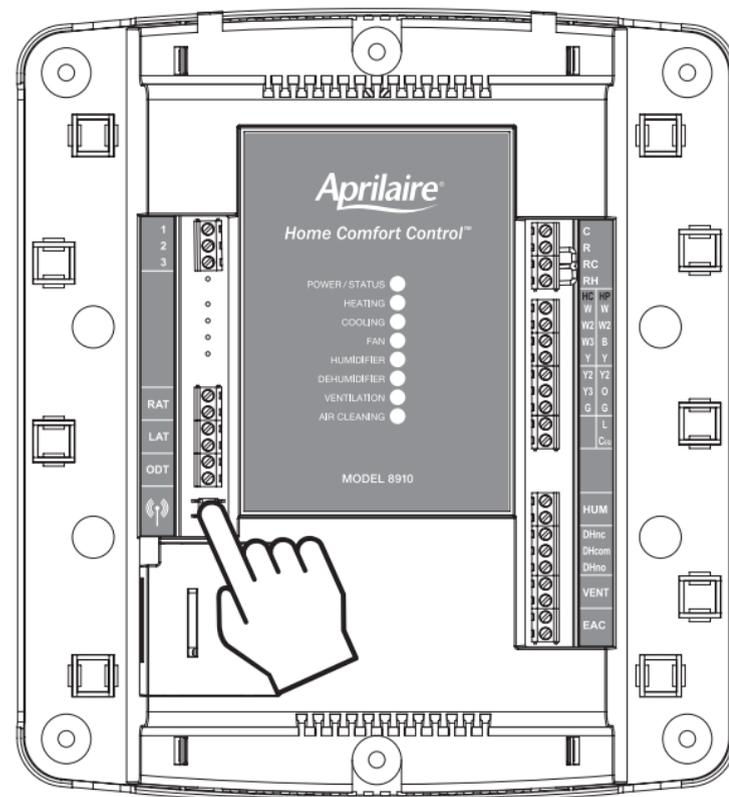


FIGURE 5

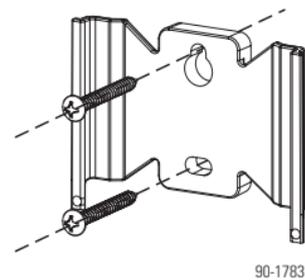


## HOW TO MOUNT THE WIRELESS OUTDOOR SENSOR

1. Select a mounting location,
  - Within 100 feet of the 8910 Equipment Control Module. (Range varies with building material types.)
  - Away from large metal obstructions that could reduce wireless communication range.
  - Away from direct rainfall (the unit is water resistant not water proof).
  - On a vertical exterior wall, at least 6 inches below any overhang.
  - Protected from direct sunlight (north side recommended).
  - At least 3' away from exhaust vents and condensing lines.
  - Above the snow line.
  - Accessible for easy battery replacement.
2. **IMPORTANT: Confirm the wireless connection at the desired location prior to installing the mounting bracket.** To confirm the wireless connection, place the wireless outdoor sensor near the desired mounting location. Confirm the outdoor temperature and RH continue to display at the 8910 user interface and there are no wireless outdoor sensor errors.

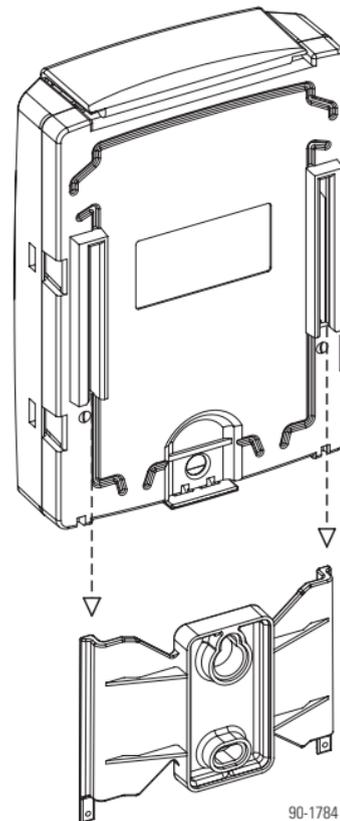
**Note:** If there is a problem with the wireless connection, it will take up to 10 minutes for the temperature and RH to stop displaying and wireless error codes to appear (see ERROR CODES section for more details). It is recommended that you wait 10 minutes before proceeding to step 3.

FIGURE 6



3. Mount bracket with the appropriate type of screws (not supplied). See **Figure 6**.
4. Insert sensor onto bracket and slide down to secure. See **Figure 7**.

FIGURE 7



## SPECIFICATIONS

Communications	Wireless 900 MHz
Wireless range	Up to 100 feet
Temperature measurement range / accuracy	-31°F to 135°F / ±3°F accuracy (0°F to 120°F)
Humidity measurement range / accuracy	0%RH to 100%RH / ±5%RH accuracy (20%RH to 80%RH)
Battery life	Approximately 2 years
Battery type	2x Lithium AA size 1.5V

## ERROR CODES

The 8910 can display these error codes related to the Wireless Outdoor Sensor:

“CHECK WIRELESS OUTDOOR SENSOR”	The 8910 Equipment Control Module cannot connect to Wireless Outdoor sensor. Confirm batteries are good and installed correctly. Confirm sensor location is not an issue by bringing the sensor closer to the Equipment Control Module or away from potential interference. Then follow the linking procedure to reconnect.
“REPLACE WIRELESS SENSOR BATTERY”	Low Batteries in Wireless Outdoor Sensor. Replace batteries in the Sensor with Lithium size AA 1.5V only.
“CHECK ECM WIRELESS MODULE”	The 8910 Equipment Control Module cannot detect the Wireless Module. Follow the installation procedure; reinstall the Wireless Module into the Equipment Control Module. Then follow the linking procedure to reconnect.

## FIVE YEAR LIMITED WARRANTY

Your Research Products Corporation Aprilaire® Wireless Outdoor Temperature and Humidity Sensor is expressly warranted for five (5) years from date of installation to be free from defects in materials or workmanship.

Research Products Corporation's exclusive obligation under this warranty shall be to supply, without charge, a replacement for any sensor which is found to be defective within such five (5) year period and which is returned, together with the date of installation, no later than thirty (30) days after said five (5) year period by you to either your original supplier or to Research Products Corporation, Madison, Wisconsin 53701.

THIS WARRANTY SHALL NOT OBLIGATE RESEARCH PRODUCTS CORPORATION FOR ANY LABOR COSTS AND SHALL NOT APPLY TO DEFECTS IN WORKMANSHIP OR MATERIALS FURNISHED BY YOUR INSTALLER AS CONTRASTED TO DEFECTS IN THE SENSOR ITSELF.

IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED IN DURATION TO THE AFORESAID FIVE YEAR PERIOD. RESEARCH PRODUCTS CORPORATION'S LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, OTHER THAN DAMAGES FOR PERSONAL INJURIES, RESULTING FROM ANY BREACH OF THE AFORESAID IMPLIED WARRANTIES OR THE ABOVE LIMITED WARRANTY IS EXPRESSLY EXCLUDED. THIS LIMITED WARRANTY IS VOID IF DEFECT(S) RESULT FROM FAILURE TO HAVE THIS SENSOR INSTALLED BY A QUALIFIED HEATING AND AIR CONDITIONING CONTRACTOR. IF THE LIMITED WARRANTY IS VOID DUE TO FAILURE TO USE A QUALIFIED CONTRACTOR, ALL DISCLAIMERS OF IMPLIED WARRANTIES SHALL BE EFFECTIVE UPON INSTALLATION.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above exclusions or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

This equipment if installed in strict accordance with the manufacturer's instructions, complies with the limits for a Class B computing device pursuant to Subpart J of Part 15 of FCC Rules.

## WARRANTY REGISTRATION

Visit us on-line at [www.aprilaire.com](http://www.aprilaire.com) to register your Aprilaire product. If you do not have on-line access, please mail a postcard with your name, address, phone number, product purchased and date of purchase to: Research Products Corporation, P.O. BOX 1467, Madison, WI 53701

**Your Warranty Registration information will not be sold or shared outside of this company.**

## FCC DECLARATION

**Warning:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

**NOTE:** This equipment has been tested and found to comply with the limits for a 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, uses 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.

### FCC RF Radiation Exposure statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.



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## IC STATEMENT

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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