

AprilAire[®]

Sensor

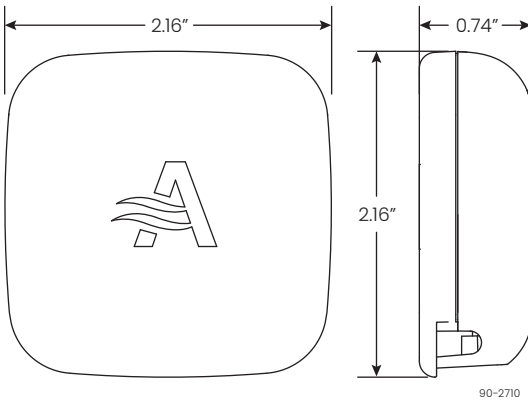
INSTALLATION AND OPERATOR'S MANUAL

Model Z100DT

Wireless Outdoor Temperature and Humidity Sensor

READ AND SAVE THESE INSTRUCTIONS

DIMENSIONS



SPECIFICATIONS

Communications	2.4 MHz
Wireless range	35 feet
Temperature measurement range/accuracy	Accuracy: ±2°F (40°F to 105°F), ±5°F outside of this range Range: -40°F to 125°F
Humidity measurement range/accuracy	Accuracy: ±5% RH between 20% and 80% RH Range: 0.5% to 99.5% RH
Battery life	Approximately 2 years
Battery type	Lithium CR2477 type

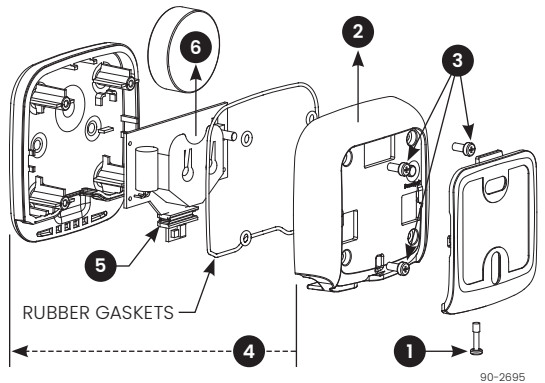
FEATURES

WHEN USED WITH A THERMOSTAT, THE WIRELESS OUTDOOR SENSOR CAN BE USED TO:

- More efficiently control an air source heat pump with balance points.
- Enable automatic humidification.
- Enable ventilation lockouts.
- Display of outdoor temperature.

BATTERY REPLACEMENT

1. Remove screw at the bottom of the backing plate.
2. Remove sensor from backing plate.
3. Remove 4 screws from back.
4. Carefully separate front and back of sensor case. Be careful to not damage or lose the rubber gaskets (4 round screws gaskets, 1 large gasket).
5. Remove green circuit board.
6. Slide battery out of clip.
7. Replace battery with lithium CR2477 type.
8. Replace cover making sure all 5 gaskets and the button cover are in place.
9. Replace sensor on backing plate.
10. Replace bottom screw to secure sensor to mounting bracket.



MOUNTING THE WIRELESS OUTDOOR SENSOR

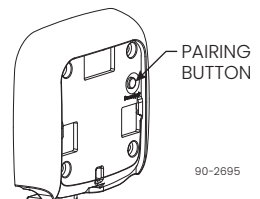
NOTE: Pair sensor with Wi-Fi thermostat before mounting.

The sensor should be mounted:

- Within 35 feet of the thermostat.
- 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 feet away from exhaust vents and condensing lines.
- Above the snow line.
- Accessible for easy battery replacement.

PAIRING THE SENSOR TO THE S86WMUPR THERMOSTAT

1. On the thermostat, navigate to wireless sensor settings: **Menu > Settings > Installer Settings** (press and hold UP and DOWN 5 seconds) > **Wireless Sensors > Add**.

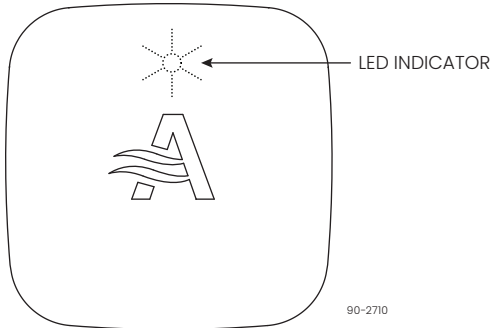


2. On the sensor, press and hold the pairing button 5 seconds (the red indicator on the front of the sensor will start flashing).
3. On the thermostat, select **Continue** and wait for the pairing process to complete.

LOW BATTERY DISPLAY

When the battery gets below 30% life left the sensor will flash the LED once every 10 seconds. The connected/paired device will display sensor low battery screen (see your thermostat or connected device manual).

SENSOR LED AND BUTTON FUNCTIONALITY



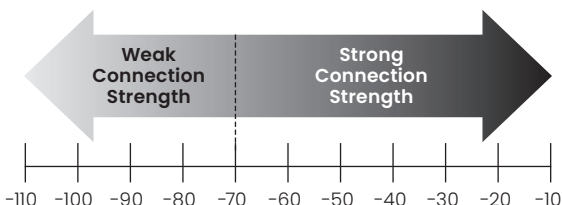
LED STATUS	
Flashes once per second	Connectivity status (pairing mode). NOTE: The sensor exits pairing mode after 30 seconds.
Flashes once per 10 seconds	Battery low power status.

BUTTON FUNCTION	
Press and hold 5 seconds	Enter pairing mode.

TROUBLESHOOTING

If the wireless sensor is experiencing connection issues with the thermostat, verify the following:

1. Connect the thermostat to a Wi-Fi network to verify the latest firmware is installed. The latest firmware will automatically install once connected to Wi-Fi.
2. On the sensor, press and release the pairing button once. This will send updated information to the thermostat.
3. On the thermostat, navigate to wireless settings: **Menu > Settings > Installer Settings** (press and hold UP and DOWN 5 seconds) **> Wireless Sensors > View**.
4. Note the RSSI value located within the View Sensor screen. The RSSI value should be greater than -70 dBm (see illustration below).
 - a. If the RSSI value is less than -70 dBm, relocate the sensor and repeat steps 2-4.
 - b. If the RSSI is greater than -70 dBm and connection issues persist, contact AprilAire customer support at 800.334.6011.



IC WARNING

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

法语警告语句

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes: (1) Cet appareil ne doit pas causer d'interférences. (2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil.

FIVE YEAR LIMITED WARRANTY

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

AprilAire'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 AprilAire, Madison, Wisconsin 53701.

THIS WARRANTY SHALL NOT OBLIGATE APRILAIRE 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. APRILAIRE'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 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: AprilAire, P.O. BOX 1467, Madison, WI 53701

Your warranty registration information will not be sold or shared outside of this company.

FCC AND ISD COMPLIANCE STATEMENTS

Contains FCC ID: 2AUXB-DSBC060

Contains IC: 25658-DSB060

This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's License-exempt RSS standard(s). 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.

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

FCC Interference Statement – Part 15.105 (b)

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 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.

To comply with FCC and Innovation, Science and Economic Development Canada's RF exposure limits for general population/uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter product procedures.