



©2022 Lennox Industries Inc.  
Dallas, Texas, USA



# Lennox® Smart Air Quality Monitor

## *Installation and Setup Guide*

508258-01 10/2022

## Table of Contents

|  |           |   |           |
|--|-----------|---|-----------|
| <b>Shipping and Packing List.....</b>                                  | <b>3</b>  | <b>Considerations.....</b>  | <b>13</b> |
| <b>Optional Accessories.....</b>                                       | <b>3</b>  | <b>Adding Smart Air Quality Monitor.....</b>                          | <b>13</b> |
| <b>Introduction.....</b>   | <b>4</b>  | <b>Management - Replace, Remove and Factory Reset.....</b>            | <b>16</b> |
| <i>Lennox® S40 Smart Thermostat .....</i>                              | <i>4</i>  | <i>To Replace.....</i>  | <i>16</i> |
| <i>Lennox® Smart Air Quality Monitor (SAQM) .....</i>                  | <i>4</i>  | <i>To Remove.....</i>   | <i>17</i> |
| <i>Lennox® Smart Technician Application .....</i>                      | <i>4</i>  | <i>Factory Reset .....</i>  | <i>17</i> |
| <b>Terminology .....</b>   | <b>4</b>  | <b>Dimensions, Operating and Storage Specifications .....</b>         | <b>17</b> |
| <b>Installation Considerations .....</b>                               | <b>5</b>  | <b>Thermostat Alert Codes for the Smart Air Quality Monitor .....</b> | <b>18</b> |
| <b>Overview.....</b>   | <b>5</b>  | <b>Lennox Smart Air Quality Monitor Troubleshooting .....</b>         | <b>24</b> |
| <i>Data Collection .....</i>   | <i>5</i>  | <b>FCC Compliance Statement .....</b>                                 | <b>25</b> |
| <i>Calculating Data .....</i>  | <i>6</i>  |   |           |
| <i>Sensor Indicator, Button, Side Switch and Vents Locations .....</i> | <i>7</i>  |   |           |
| <i>Status Indicator Light Color Descriptions.....</i>                  | <i>7</i>  |   |           |
| <i>Side Switch .....</i>   | <i>7</i>  |   |           |
| <b>Downloading Lennox Smart Technician App.....</b>                    | <b>8</b>  |   |           |
| <i>Lennox Smart Technician App .....</i>                               | <i>8</i>  |   |           |
| <i>Lennox Smart Thermostat App .....</i>                               | <i>8</i>  |   |           |
| <b>Installation.....</b>   | <b>9</b>  |   |           |
| <i>Selecting Placement .....</i>                                       | <i>9</i>  |   |           |
| <i>Confirming Placement Location.....</i>                              | <i>9</i>  |   |           |
| <i>Installing on Wall.....</i>   | <i>10</i> |   |           |
| <i>Terminal Designations and Wiring Recommendations .....</i>          | <i>11</i> |   |           |
| <i>Powering the Smart Air Quality Monitor .....</i>                    | <i>11</i> |   |           |
| <i>Using Indoor Unit 24VAC Transformer.....</i>                        | <i>12</i> |   |           |
| <b>Adding SAQM .....</b>   | <b>13</b> |   |           |



## IMPORTANT

Improper installation, adjustment, alteration, service or maintenance can cause personal injury, loss of life, or damage to property.

Installation and service must be performed by a licensed professional installer (or equivalent) or a service agency.

## Optional Accessories

If the indoor unit already has other devices (for example a equipment interface module, or damper control module) connected to it, we highly recommend using a separate power source.

Use standard thermostat wiring and a field-provided 24VAC transformer (10P17) or 24VAC wall adapter (18M13) to make the power connections.

## Shipping and Packing List

Package 1 of 1 contains:

| Parts                            | Quantity |
|----------------------------------|----------|
| Lennox Smart Air Quality Monitor | 1        |
| Wall Anchors                     | 4        |
| Screw #4 X 1.25 SMS              | 4        |
| Warranty                         | 1        |
| Homeowner Quick Start Guide      | 1        |
| Installer Quick Start Guide      | 1        |
| Mounting Template                | 1        |
| Splicing Connectors with Levers  | 2        |



## IMPORTANT

Take care not to drop the Lennox Smart Air Quality Monitor during unpacking. Dropping device could result in damage to internal components which could render it unusable.



## IMPORTANT

DO NOT paint the Lennox Smart Air Quality Monitor. Doing so could possibly affect the monitoring functions of various on-board sensors.

This guide can be used by the installer to create the smart devices network and to add, replace and remove a Lennox Smart Air Quality Monitor.

### LENNOX® S40 SMART THERMOSTAT

This thermostat is the smart device network host for Lennox smart devices. This Lennox S40 Smart Thermostat will be referred to throughout this document as thermostat.

### LENNOX® SMART AIR QUALITY MONITOR (SAQM)

- The device collects data on Carbon Dioxide ( $\text{CO}_2$ ), Particulate Matter ( $\text{PM}_{2.5}$ ) and Volatile Organic Compounds (VOCs). The device then transmits to the thermostat which analyzes the data and displays it on the thermostat's display.
- Continually monitors indoor air quality and sends data to thermostat once every minute.
- Unit is powered typically by either a separate 24VAC transformer installed at the indoor unit or a plug-in type 24VAC transformer.
- Only one (1) device is supported per single S40 thermostat smart devices network.



This application is used to manage the S40 thermostat smart devices network (adding, removing and renaming the device).

### Terminology

Table 1. Terminology

| Term              | Definition  |
|-------------------|---|
| $\text{PM}_{2.5}$ | PM stands for particulate matter (also called particle pollution), the term for a mixture of solid particles and liquid droplets found in the air you can breath. The 2.5 is the fine inhalable particles, with the diameters that are generally 2.5 micrometers and smaller. Breathable air particles can include pet dander, bacteria, mold, chemicals from cleaning products, building materials, fuel-burning equipment such as furnaces, upholstered goods, cooking, sweeping, copy machines, skin flakes, clothing fibers, combustion, cooking, smoke, dust, dirt, spores, and pollen. Sources vary seasonally. |
| VOC               | Volatile organic compounds (VOC) are a combination of gases and odors released/emitted/off-gassed from a variety of sources. VOC include a variety of chemicals, some of which may have a short- and long-term adverse health effects. Alternate terms are odors, gases, vapors and chemicals.  |

**Table 1. Terminology**

| Term            | Definition   |
|-----------------|--|
| CO <sub>2</sub> | CO <sub>2</sub> or carbon dioxide is an odorless, colorless, non-flammable gas. Carbon dioxide is a by-product of combustion, as well as a result of the metabolic process in living organisms (for example, you remove it from your body via the lungs in exhaled air). |
| BLE             | BLE stands for Bluetooth Low Energy. BLE is a variation of the Bluetooth wireless standard designed for low power consumption.   |

## Installation Considerations

If the desired installation location for the SAQM is not within range of the thermostat, then a Lennox Wireless Extender (22V26) can be used to increase the effective range of the network.

## Do

- Read this entire document, noting which procedures pertain to your specific equipment and system requirements.
- Conform to local and national building and electrical codes and ordinances.
- Installed SAQM a minimum of **5 feet (1.50 meters) up from the floor.**

- Installed on a wall with a minimal distance six (6) inches (154mm) from the S40 thermostat.
- Install in a common area for air sampling.

## Do Not

- Install on voltages higher than 30VAC.
- Install in direct sunlight
- Install near discharge air vents.
- Install near fireplaces or other heat sources
- Install on exterior walls
- Install near windows or doors
- Install near kitchens
- Install in rarely used rooms or hallways

## Overview

## DATA COLLECTION

The device collects data on fine particles (PM<sub>2.5</sub>), VOCs and CO<sub>2</sub>. For further details, see "*Table 1. Terminology*" on page 4 for full descriptions.

The device then transmits this data through smart devices network to the thermostat which analyzes the data and displays it on the thermostat.

When the side switch is set to the **DOWN** position it will turn off the internal fan and stops sending data to the S40 Smart Thermostat. Setting the side switch to the **UP** position will restore all functions. An alert code 70003 is raised and will remain active until the side switch is set back to the **UP** position.

The **SAQM** details screen will display the last reading from the device before the switch was changed to the **DOWN** position.

**NOTE:** *It could take 2-10 minutes to report initial air quality data after adding the smart device to the smart devices network. The farther the smart device is from the S40 Thermostat, the longer it may take.*

## CALCULATING DATA



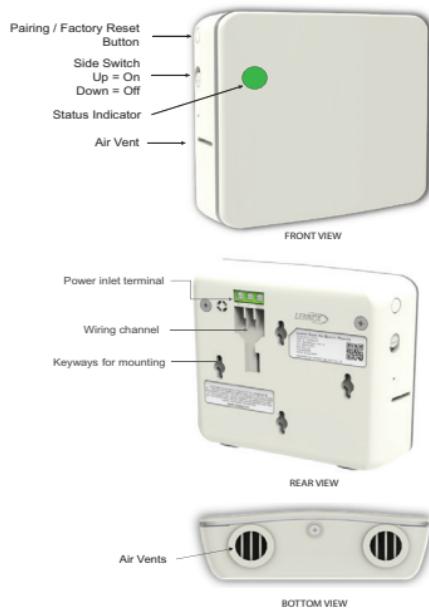
### IMPORTANT

After adding the smart device to the smart devices network, it will begin displaying information from the Smart Air Quality Monitor once there is a blower, cooling, or heating demand. Until the first thermostat demand, the thermostat's SAQM screen will indicate it is calculating.



Figure 1. SAQM Calculating

## SENSOR INDICATOR, BUTTON, SIDE SWITCH AND VENTS LOCATIONS



**Figure 2. Sensor Indicator, Button, Side Switch and Vents Locations (Front, Bottom and Rear Views)**

## STATUS INDICATOR LIGHT COLOR DESCRIPTIONS

**NOTE:** Light is only on when there is an issue with signal strength.

**Table 2. Status Indicator - Two Color Descriptions**

| Function        | Light Color | Description  |
|-----------------|-------------|--|
| Signal Strength | BLUE        | <ul style="list-style-type: none"><li>A solid blue light indicates the signal strength is low or has lost connection to the thermostat.</li><li>No blue light indicates signal strength is good.</li></ul> |
| Pairing         | GREEN       | A flashing green light indicates the unit is in pairing mode.  |

See "Table 5. Lennox Smart Air Quality Monitor Alert Codes" on page 19 for a complete list of alerts applicable to these smart devices that are generated by the S40 thermostat.

## SIDE SWITCH

The primary reason for this switch is to turn off the internal fan in case the device is installed in a bedroom.

The side switch on the **SAQM** when in the **UP** position turns on the internal fan and transmits air quality data to the thermostat.

When the switch is set to the **DOWN** position it will turn off the internal fan and stop air quality data to the thermostat.

An alert code 70003 will be displayed indicating the switch is **OFF**. The alert code will automatically clear once the switch has been set back to the **ON** position.

While the switch is in the **DOWN** position, the latest reading from the **SAQM** will be displayed on the thermostat. It will not update that information until the switch is moved back to **UP** position.



### IMPORTANT

The dealer and homeowner may receive an email indicating that Alert Code 70003 is a no cool, no heat condition. This is not true and the HVAC system will operate normally. This type of notification is due to alert code being classified as a Service Urgent.

### LENNOX SMART TECHNICIAN APP



Google Play  
(Android™)



App Store  
(iOS)

### LENNOX SMART THERMOSTAT APP



Google Play  
(Android™)



App Store  
(iOS)

### Downloading Lennox Smart Technician App

Scan the QR codes listed as follows to download the specific application you desire.

## Installation

### SELECTING PLACEMENT

As previously mentioned, it is recommended that the **SAQM** is installed near the thermostat. Recommended minimum distance from the thermostat is six (6) inches. This is required so that any heat given off from the **SAQM** does not affect temperature sensing function of the thermostat.



- A field-provided 24VAC, 1 AMP or greater plug-in wall power adapter will be required.
- It is recommended that the **SAQM** is paired near the thermostat and then positioned in home at the desired installation location.

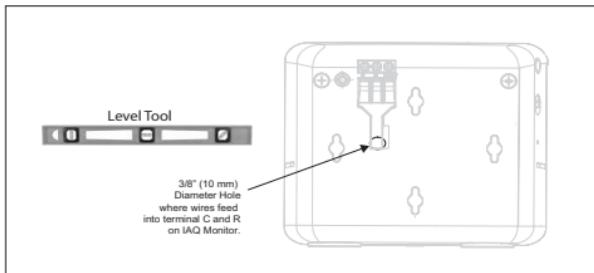
- Once power is applied to the smart device at the desired location, then check the status of the LED (see "*Table 2. Status Indicator - Two Color Descriptions*". Maximum range without an extender is approximately 70 feet (21.3 meters).
- If a blue LED is on, then move the smart device closer to the S40 thermostat or add a **Lennox Wireless Extender** (sold separately) between the smart device and thermostat.
- For wall placement, install smart device at a minimum height of 5 feet or 1.5 meters on an interior wall. See "*Installing on Wall*" on page 10 for illustration example.

### CONFIRMING PLACEMENT LOCATION

1. Take the smart device to the desired location after pairing has been completed (see "*Adding SAQM*" on page 13 near the S40 thermostat).
2. Apply power to the **SAQM**.
3. Observe the status of the signal strength LED indicator. If the blue LED comes on, then the smart device is receiving a weak or no signal. Either reposition the smart device or add a Lennox Wireless Extender.

## INSTALLING ON WALL

1. Use the included wall template along with a field-provided level tool for proper horizontal alignment on the wall before marking the mounting holes.
2. Cut or drill 3/8" hole in wall for **R** and **C** wiring. Insure wiring hole is positioned properly in relationship to smart device terminals location.



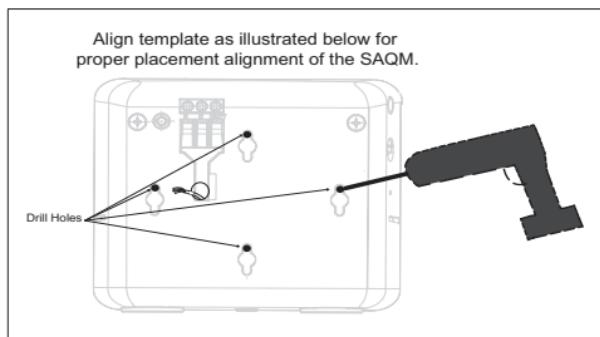
3. Pull about three inches (75mm) of thermostat wire (18 - 24 AWG) through the opening and remove the outer thermostat wire jacket.



### IMPORTANT

Seal wire hole in wall to prevent internal wall containments from affecting sensors.

4. Strip 1/4" (6 mm) insulation from end of each wire.
5. The other end of the wiring should be routed behind the wall to the thermostat sub-base location. Use the provided three-wire splice connectors to connect to the **R** and **C** terminals (see "*Terminal Designations and Wiring Recommendations*" on page 11 for wiring details).
6. Using the provided wall template, drill 3/16" (5 mm) holes at marked locations on the wall for anchors.



7. Then insert wall anchors into holes until flush with the wall.

For drywall applications insert provided wall anchors in holes until flush with wall and then back out for proper height for mounting.



Screw depth adjustments may be required in order to accommodate a snug fit for the Smart Air Quality Monitor when attaching to the wall.

**Table 3. Terminal Designations and Wiring Recommendations**

| Terminal Designation | Thermostat Wiring   |
|----------------------|---|
| R<br>(24VAC input)   |   |
| C<br>(24VAC return)  | Use 18-24AWG non-shielded thermostat wiring for R and C connections |

## **TERMINAL DESIGNATIONS AND WIRING RECOMMENDATIONS**

Use standard thermostat wiring and a field-provided 24VAC transformer (10P17) or 24VAC wall adapter (18M13) to make the power connections as exemplified in the following illustration.

## **POWERING THE SMART AIR QUALITY MONITOR**

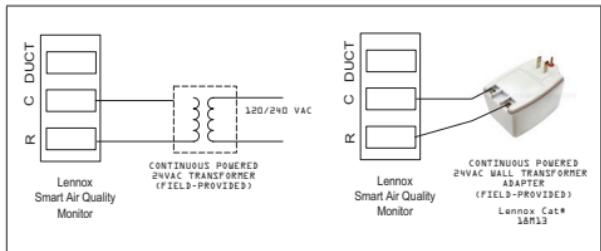
The following are considerations concerning powering the SAQM.

- Recommend connecting SAQM to the S40 using the provided splicing connectors. Both devices will be powered by the indoor unit transformer as long as no other equipment is attached (see "*Figure 4. Using Indoor Unit Power and Connecting at Thermostat*" on page 12).
- If additional equipment other than the S40 and SAQM are connected to the indoor unit transformer then an additional transformer is required.

- The additional transformer might be a secondary transformer or a wall plug ("Figure 3. Separate or Plug-in Transformers").

**Table 4. 24VAC Transformers**

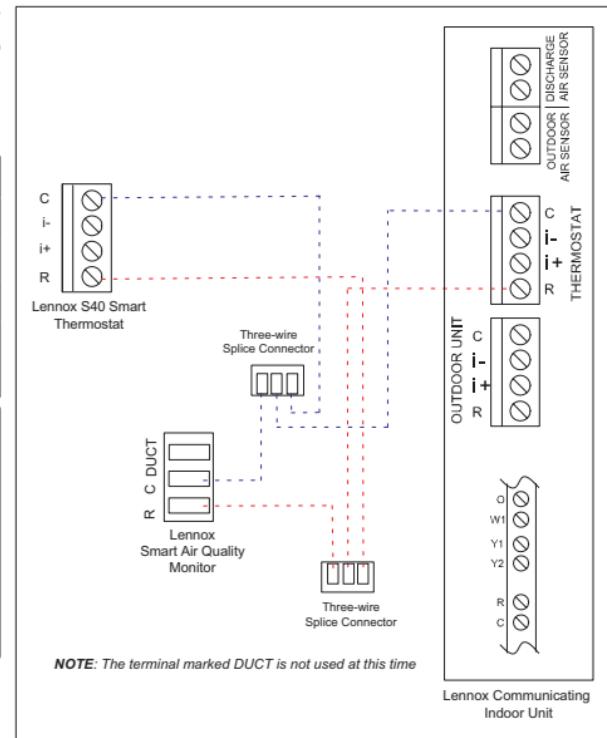
| Cat#  | Size | Description                                 |
|-------|------|---|
| 10P17 | 40VA | 120/208/240VAC, 24 VAC                      |
| 10P87 | 50VA |   |
| 12P61 | 75VA |   |
| 18M13 | 40VA | Plug-in Wall Transformer<br>120 VAC, 24 VAC |



**Figure 3. Separate or Plug-in Transformers**

## USING INDOOR UNIT 24VAC TRANSFORMER

Use the provided three wire split connectors to power the SAQM from the thermostat power connections.



**Figure 4. Using Indoor Unit Power and Connecting at Thermostat**

## Adding SAQM

### CONSIDERATIONS

1. Only the **S40 Smart Technician App** can be used to create the smart devices network. Both **S40 Smart Technician** and **Smart Thermostat Apps** can be used to add/remove sensors.
2. When adding or removing the **SAQM** the **S40 Smart Technician** or **Smart Thermostat Apps** (mobile device) will need to be within 10 feet (3 meters) of the thermostat.
3. If the **SAQM** just added does not appear under the (**Equipment List** or **My Home**) screens, then allow a few minutes to pass before checking again.
4. Do not switch back-and-forth between your mobile device's screens during the adding or removing procedure.
5. If adding a **SAQM** which will be out of direct range of the thermostat and will connect via a **Lennox Wireless Extender**, then the **Lennox Smart Technician or Thermostat Apps** do not required the user's mobile device to be near the thermostat for the adding or removing procedure.

6. Always give each **SAQM** a unique name.
7. After removing a functional **SAQM**, make sure to perform a factory reset.
8. In case the adding procedure fails, then always perform a factory reset on the **SAQM** before trying to add it again.

### ADDING SMART AIR QUALITY MONITOR

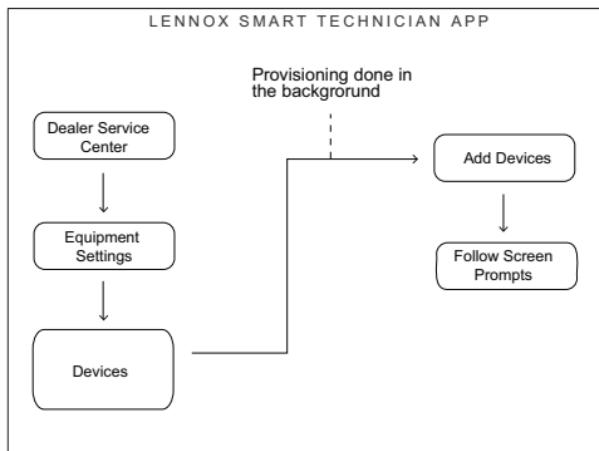
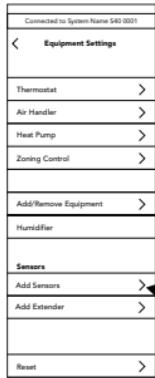


Figure 5. Adding Smart Device Flow Process

**NOTE:** The thermostat smart devices network is inactive until the S40 thermostat has

*been fully commissioned and the first smart device is added.*

To create the smart devices network and to add the first smart device use the following procedure.



**4. Under Devices, select Add Devices**

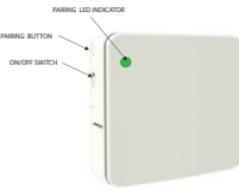


## IMPORTANT

**DO NOT** interrupt the adding of the smart device. If interrupted the smart device will need to be factory-reset.

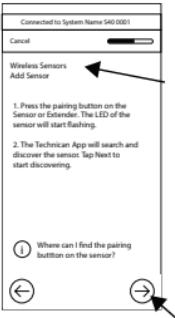
- 5.** The **Create Smart Devices Network** will appear. Select the right arrow at bottom right corner of screen to continue.

**NOTE:** *This screen will only appear once during the initial smart device being added.*

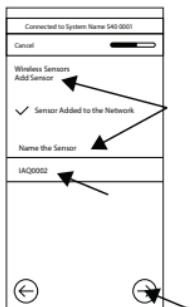
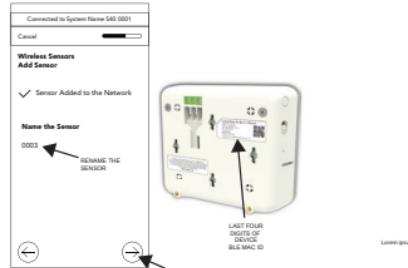


- 6.** The **Wireless Sensor Add** screen will appear. Now press the **pairing** button on the smart device. Verify that the smart device's green light is flashing which indicates it is in pairing mode.

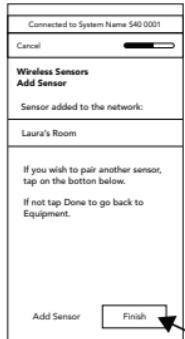
- 7.** The **Lennox Smart Technician App** will start searching for the **SAQM**. Select the right arrow at the bottom of the screen to continue.

8. On the next screen, select the **SAQM** that appears on the screen and then select the right arrow at the bottom of the page.
- 
9. The **SAQM** if successfully added will display a screen confirming success. On this screen the **SAQM** can also be renamed.

**NOTE:** Once the **SAQM** is added, the last four digits of the smart device's BLE MAC ID will be listed. Confirm ID with the BLE MAC ID listed on back of smart device.



- NOTE:** The smart device can be also be renamed using the thermostat as well. When naming smart devices no blank spaces or special characters are allowed.
10. Confirm all information listed on the screen is correct. Select **Finish**.



## Management - Replace, Remove and Factory Reset

Use the **Lennox Smart Technician App** to perform any of the following tasks.

To remove the **SAQM** from the Lennox S40 thermostat, use the **Lennox Smart Technician App**.



## IMPORTANT

It is recommended that any working smart device that is taken out of service, should be removed from the network and a factory reset performed.

### To REPLACE

1. Navigate to **Dealer Control Center > Equipment Settings** and select the **SAQM** device to be removed.
2. Select either **replace**.
3. Press the **pairing** button on the new **SAQM** to start the replacement procedure.
4. The app will search for the new **SAQM**. If successfully found, then select the new **SAQM** and then select the right arrow at the bottom of the screen to continue.
5. A screen will appear indicating the **SAQM** is being replaced.
6. If successful, a screen will appear indicating replacement was successful.
7. Select **Finish**.

8. Perform a factory reset to ensure the removed **SAQM** has been completely removed from the smart devices network.



## IMPORTANT

It is important that at least one smart device needs to be paired to the smart devices network. Removing all devices will deactivate the smart devices network. Creating a new network will have to be accomplished by your installer.

### To REMOVE

1. Navigate to **Dealer Control Center > Equipment Settings**
2. Select the **SAQM** device to be removed.
3. Select **remove** and follow any additional screen prompts.

### FACTORY RESET

To perform a factory reset of this device use the following procedure:

- a. Press and hold the **pairing button** for 10 seconds and release.
- b. A flashing green light on the device

indicates it has been factory reset and is ready to be paired.

After performing the factory reset, the **SAQM** can be reused with another S40 thermostat in the home.

### Dimensions, Operating and Storage Specifications

The following is the operating and storage specifications for the device:

- Operating temperature: -4°F to 131°F (-20°C to 55°C)
- Operating humidity: 5%RH to 95%RH
- Storage temperature: -40°F to 185°F (-40°C to 85°C)
- Storage humidity: 5%RH to 95%RH
- Unit Dimension: 3-5/8 x 4-3/8 x 1-3/8 in. (92 x 111 x 35 mm).

## Thermostat Alert Codes for the Smart Air Quality Monitor

To expand a specific notification to access a more detail description of the alert code, press the down arrow to expand the description.

- **Service Urgent** - Your system is in a No Heat/ No Cool condition or not operating correctly. Dealer service call is needed to get the system running.
- **Service Soon** - System is not reaching set point or is partially operating. A Dealer will need to service it with 24-48 hours.
- **Maintenance** alerts are those intervals you put in the thermostat as reminders to change filters, replace UV lamps, tune up systems.
- **Information Only Dealer** - System is operating normally. Collected thermostat data is accessible to Dealer as system history.

**Table 5. Lennox Smart Air Quality Monitor Alert Codes**

| Alert ID | Source device Causing Alert | Alert Code Message         | Priority Condition | Troubleshooting  | Clear Condition  |
|----------|-----------------------------|----------------------------|--------------------|--|--|
| 70001    | SAQM                        | IAQ: Internal Sensor Fault | Service Soon       | <p>This issue will occur when:</p> <ul style="list-style-type: none"> <li>• Any of the carbon dioxide, volatile organic compounds and Particulate Matter 2.5 sensors output experiences an internal communication outage.</li> <li>• Collected data values are out of range.</li> </ul> <p>Cycle device power may clear condition.</p> <p>To cycle power, remove device from the wall and disconnect the <b>R</b> terminal and then reconnect.</p> <p>If cycling power does not resolve issue then:</p> <ul style="list-style-type: none"> <li>• Remove device from the smart devices network.</li> <li>• Perform a factory reset of the device. See "<i>Factory Reset</i>" on page 17 for procedure.</li> <li>• Attempt to add device back to smart devices network.</li> </ul> | <p>If cycling power or factory reset does not resolve issue then replace the <b>SAQM</b>.</p> <p>Automatically clears when the system detects that the issue no longer exists.</p> |

**Table 5. Lennox Smart Air Quality Monitor Alert Codes**

| Alert ID | Source device Causing Alert | Alert Code Message               | Priority Condition | Troubleshooting  | Clear Condition  |
|----------|-----------------------------|----------------------------------|--------------------|--|--|
| 70002    | SAQM                        | IAQ: Internal Data Fault         | Service Soon       | <p>Unable to access internal data.<br/>Cycle device power may clear condition.</p> <p>To cycle power, remove device from the wall and disconnect the <b>R</b> terminal and then reconnect.</p> <p>If cycling power does not resolve issue then:</p> <ul style="list-style-type: none"> <li>• Remove device from the smart devices network.</li> <li>• Perform a factory reset of the device. See "<i>Factory Reset</i>" on page 17 for procedure.</li> <li>• Perform the procedure to add the device back to smart devices network.</li> </ul> | <p>If recycling power or factory reset does not resolve issue then replace the <b>SAQM</b>.</p> <p>Automatically clears when the system detects that the issue no longer exists.</p> |
| 70003    | SAQM                        | IAQ: Side Switch in OFF position | Service Urgent     | Slide the side switch to the ON position. ON is the up position.   | When the side switch is set back to the ON position it will automatically clear this alert code.   |
| 70004    | SAQM                        | IAQ: Replace Smart IAQ Monitor   | Service Soon       | <p>The five year service life of the device is about to expire.</p> <p>Device will continue to function however sensor data collected may become unreliable thus affecting air quality in the home.</p>  | <p>Remove device from smart devices network and then replace the <b>SAQM</b>.</p> <p>Automatically clears when the system detects that the issue no longer exists.</p>               |

**Table 5. Lennox Smart Air Quality Monitor Alert Codes**

| Alert ID | Source device Causing Alert | Alert Code Message               | Priority Condition      | Troubleshooting  | Clear Condition   |
|----------|-----------------------------|----------------------------------|-------------------------|--|---|
| 80001    | Thermostat                  | IAQ: Persistent Poor Air Quality | Information only Dealer | <p>Cycle power to device. To cycle power, remove device from the wall and disconnect the <b>R</b> terminal and then reconnect.</p> <ul style="list-style-type: none"> <li>• If cycling power does not resolve the issue, check all installed Indoor Air Quality (IAQ) equipment installed in the HVAC system. For example check:           <ul style="list-style-type: none"> <li>» All installed IAQ equipment are power on, connected and working properly.</li> <li>» HC air filters and replace if dirty.</li> <li>» PureAir or PureAir S UV lamp and if not working replace. Check filter and replace if dirty.</li> <li>» ERV/HRV filter and replace if dirty.</li> <li>» UV Germicidal lamp is working and replace if necessary.</li> </ul> </li> </ul> | <p>If cycling power and checking all installed IAQ equipment does not resolve the issue, then replace the <b>SAQM</b>.</p> <p>Automatically clears when the system detects that the issue no longer exists.</p> |

Table 5. Lennox Smart Air Quality Monitor Alert Codes

| Alert ID | Source device Causing Alert | Alert Code Message                               | Priority Condition | Troubleshooting   | Clear Condition  |
|----------|-----------------------------|--|--------------------|---|--|
| 80002    | Thermostat                  | XX:<br>Unresponsive<br>Wireless device<br>Fault  | Service Soon       | <p>The smart device is connected to the network but has failed to respond to commands.</p> <ul style="list-style-type: none"> <li>• Try cycling power to device. To cycle power, remove device from the wall and disconnect the <b>R</b> terminal and then reconnect.</li> <li>• If cycling power does not resolve issue then: <ul style="list-style-type: none"> <li>» Remove device from the smart devices network.</li> <li>» Perform a factory reset of the device. See "<i>Factory Reset</i>" on page 17 for procedure.</li> <li>» Attempt to add device back to smart devices network.</li> </ul> </li> </ul> | <p>If recycling power or factory reset does not resolve issue then replace the <b>SAQM</b>.</p> <p>Automatically clears when the system detects that the issue no longer exists.</p> |
| 80003    | Thermostat                  | Lost<br>communication<br>with wireless<br>device | Service Soon       | <ul style="list-style-type: none"> <li>• Try cycling power to the device. To cycle power, remove device from the wall and disconnect the <b>R</b> terminal and then reconnect.</li> <li>• If cycling power does not resolve issue then: <ul style="list-style-type: none"> <li>» Remove device from the smart devices network.</li> <li>» Perform a factory reset of the device. See "<i>Factory Reset</i>" on page 17 for procedure.</li> <li>» Attempt to add device back to smart devices network.</li> </ul> </li> </ul>  | <p>If recycling power or factory reset does not resolve issue then replace the <b>SAQM</b>.</p> <p>Automatically clears when the system detects that the issue no longer exists.</p> |

**Table 5. Lennox Smart Air Quality Monitor Alert Codes**

| Alert ID | Source device Causing Alert | Alert Code Message                                 | Priority Condition | Troubleshooting   | Clear Condition  |
|----------|-----------------------------|--|--------------------|---|--|
| 80004    | Thermostat                  | XX: {Custom Sensor Name} : Wireless device Missing | Service Soon       | <p>Device may be no longer connected smart devices network.</p> <ul style="list-style-type: none"> <li>• Verify device has power.</li> <li>• Verify device has good signal strength.</li> <li>• Try cycling power to the device. To cycle power, remove device from the wall and disconnect the <b>R</b> terminal and then reconnect.</li> <li>• If cycling power does not resolve issue then: <ul style="list-style-type: none"> <li>» Remove device from the smart devices network if possible. If not, proceed to next step.</li> <li>» Perform a factory reset of the device. See "<i>Factory Reset</i>" on page 17 for procedure.</li> <li>» Attempt to add device back to smart devices network.</li> </ul> </li> </ul> | <p>If recycling power or factory reset does not resolve issue then replace the <b>SAQM</b>.</p> <p>Automatically clears when the system detects that the issue no longer exists.</p> |
| 80005    | Thermostat                  | XX: Unknown Wireless device Found.                 | Service Soon       | <p>Device has been discovered, however, it has not been connected to the wireless network.</p> <p>Add the wireless bluetooth device to the wireless network or remove the device from location</p>  | Automatically clears when the system detects that the issue no longer exists.  |

## Lennox Smart Air Quality Monitor Troubleshooting

| Condition  | Resolution  |
|--|---|
| Device is not functioning.   | <ul style="list-style-type: none"><li>• Check for damage</li><li>• Check that power is available and wires are connected correctly at the device and thermostat wall mount.</li></ul>   |
| Device fail to respond to a given command.   | <ul style="list-style-type: none"><li>• Cycle power to the device. To cycle power, remove device from the wall and disconnect the <b>R</b> terminal and then reconnect.</li><li>• If cycling power does not resolve issue then:<ul style="list-style-type: none"><li>» Remove device from the smart devices network if possible. If not, proceed to next step.</li><li>» Perform a factory reset of the device. See "<i>Factory Reset</i>" on page 17 for procedure.</li><li>» Attempt to add device back to smart devices network.</li></ul></li></ul> |
| For line powered smart devices this will be equal to or greater than 3 minutes to declare device has failed. | <ul style="list-style-type: none"><li>• Cycle power to the device. To cycle power, remove device from the wall and disconnect the <b>R</b> terminal and then reconnect.</li><li>• If cycling power does not resolve issue then:<ul style="list-style-type: none"><li>» Remove device from the smart devices network if possible. If not, proceed to next step.</li><li>» Perform a factory reset of the device. See "<i>Factory Reset</i>" on page 17 for procedure.</li><li>» Attempt to add device back to smart devices network.</li></ul></li></ul> |
| Smart device not found during discovery process  | Device may be out of range or no power.   |
| New smart device found during discovery process, but not available in installer provided list.               | Cleared by technician. The technician app provides "add this unknown device in installer list" and sends it to thermostat.  |

## FCC Compliance Statement

PART 15.19 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. FCC Interference Statement — PART 15.105 (B).
3. 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.
4. 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.

## RF Exposure Information

This device meets the FCC and ISED requirements for RF exposure in public or uncontrolled environments.

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.





