Lennox S40 (22V24)

Lennox S40 Smart Thermostat (Model 22V24) User Manual

Your Guide to Optimal Home Comfort and Control

1. INTRODUCTION

The Lennox S40 Smart Thermostat is designed to provide precise control over your home's heating, ventilation, and air conditioning (HVAC) system. This advanced thermostat integrates with Lennox communicating products to automatically configure and optimize your system for enhanced comfort, performance, and energy efficiency.

Key features include a user-friendly touchscreen display, programmable schedules, geo-fencing capabilities, remote access via the Lennox Smart app, and compatibility with smart home ecosystems like Alexa and Google Assistant. The S40 also supports advanced accessories such as the Smart Room Sensor, Air Quality Monitor, and Wireless Extender to create a comprehensive home comfort solution.
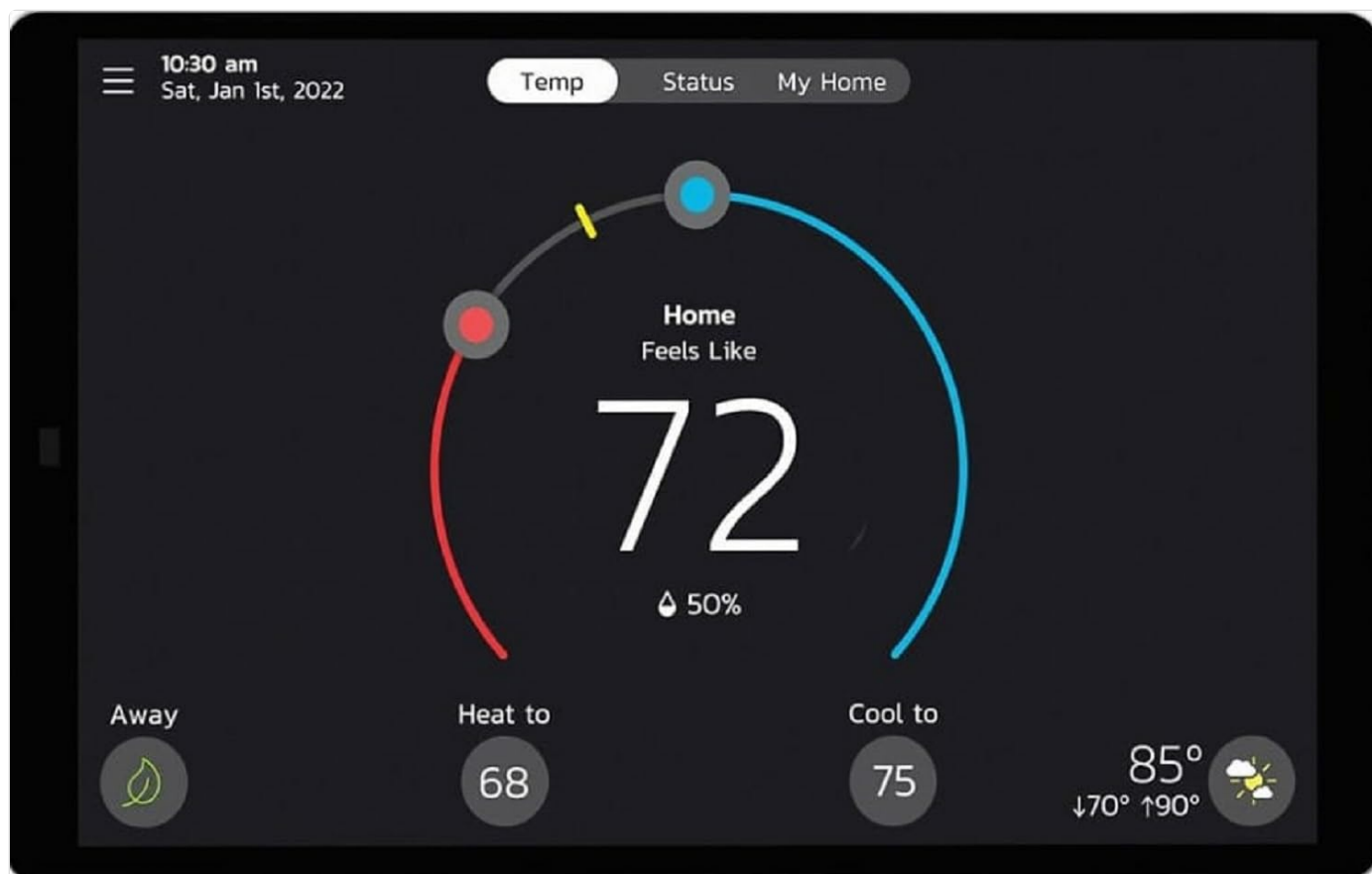
Figure 1: Lennox S40 Smart Thermostat

The Lennox S40 Smart Thermostat features a sleek design with a large, intuitive touchscreen display for easy interaction and system management.

2. SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and warranty validity of your Lennox S40 Smart Thermostat.**It is strongly recommended to hire a certified HVAC installer for installation.** Failure to use a professional HVAC installer may void the product warranty.

2.1 Compatibility

- Compatible with most 24VAC furnaces, air conditioners, air handlers, and heat pumps (up to 3 stages of heat and 2 stages of cooling).
- Designed for Lennox communicating HVAC equipment.
- Supports conventional HVAC systems with the optional Equipment Interface Module (EIM).
- Requires 4-wire standard thermostat wiring. Use shielded thermostat cable to prevent noise interference.

2.2 Installation Steps (Professional Installation Recommended)

1. **Mounting:** Secure the provided wall plate using the mounting kit (screws, anchors).
2. **Wiring:** Connect the 4-wire standard thermostat wiring to the appropriate terminals on the wall plate.
3. **Thermostat Attachment:** Attach the S40 thermostat to the mounted wall plate.
4. **Initial Configuration:** Use the Lennox Smart Technician app for quick system configuration. The app assists with model and serial number recognition for hassle-free setup.
5. **Network Connection:** Connect the thermostat to your home Wi-Fi network for remote access and smart features.

Figure 2: Lennox S40 Smart Thermostat with dimensions (2.5"D x 7"W x 4.5"H)

Ensure adequate space for installation, considering the thermostat's dimensions.

3. OPERATING YOUR THERMOSTAT

The Lennox S40 features a 7-inch high-definition capacitive touchscreen display (1280 x 800 resolution, 16:9 screen ratio, 72dpi) for intuitive control of your home comfort system.

3.1 Touchscreen Interface

Navigate through menus and adjust settings directly on the touchscreen. The interface displays current temperature, humidity, system status, and weather information.
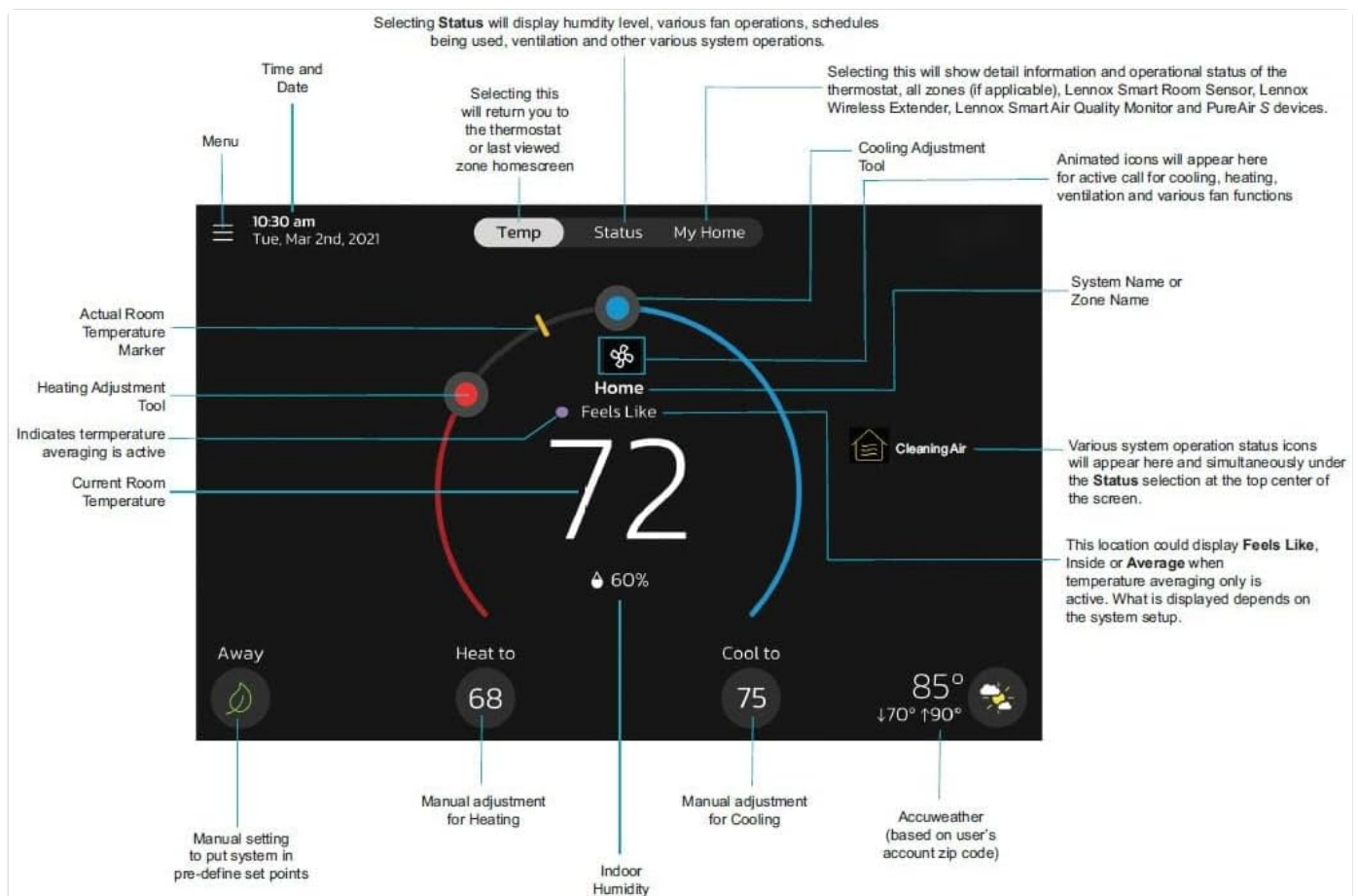
Figure 3: Annotated Lennox S40 Thermostat Display

This image highlights key areas of the S40 display, including time and date, menu access, temperature adjustments, system status, indoor humidity, and weather data.

3.2 Smart Features

- **Multiple Schedules:** Create and customize various heating and cooling schedules to match your daily routine.
- **One-Touch Away Mode:** Quickly activate an energy-saving "Away" setting with a single touch.
- **Smart Away (Geo-Fencing):** Utilizes geo-fencing technology to automatically adjust temperature settings based on your proximity to home, optimizing energy usage.
- **Weather-On-Demand:** Access live weather data and a seven-day forecast directly from the thermostat screen.
- **Smart Zoning System (iHarmony):** If equipped with a Smart Zoning System, the S40 allows for whole-home zoning control, managing comfort in different areas of your home.
- **Smart Room Sensor Integration:** Enhance temperature balance across rooms by integrating Smart Room Sensors.
- **Smart Air Quality Monitor Integration:** Detects air pollutants and triggers air cleaning on demand when connected to a Lennox Smart Air Quality Monitor.
- **Wireless Extender:** The Lennox Wireless Extender can nearly double the connection coverage area for your communicating equipment, ensuring reliable operation.

3.3 Remote Access and Voice Control

- **Lennox Smart App:** Control your thermostat remotely from anywhere using the Lennox Smart app on your smartphone or tablet.
- **Voice Assistants:** The S40 is compatible with Amazon Alexa and Google Assistant for convenient voice control.

4. MAINTENANCE

The Lennox S40 Smart Thermostat helps you maintain your HVAC system's efficiency and longevity through various alerts and diagnostic tools.

- **System Warnings and Maintenance Alerts:** The intuitive interface displays alerts for system issues or routine maintenance reminders (e.g., filter changes).
- **Run Tests:** Perform diagnostic tests on the complete system or individual components directly from the thermostat.
- **Service Dashboard:** Real-time monitoring of installed smart systems is available through the Service Dashboard, providing insights into operational parameters.
- **Remote Diagnostics Sharing:** If your system goes out of tune, the S40 can automatically alert you and allow you to remotely share diagnostic information with your local Lennox dealer for efficient service.
- **Air Quality Management:** When paired with a Smart Air Quality Monitor, the system can trigger air cleaning cycles based on detected pollutants. Fan options can also be configured to ensure minimum air circulation for improved air quality.

5. TROUBLESHOOTING

If you encounter issues with your Lennox S40 Smart Thermostat, refer to the following common troubleshooting tips. For complex problems, contact a certified HVAC professional.

- **No Power/Blank Screen:**

    - Check your circuit breaker for the HVAC system.
    - Ensure the thermostat is properly seated on its wall plate.
    - Verify 24VAC power supply to the thermostat.

- **Incorrect Temperature Readings:**

    - Ensure the thermostat is not exposed to direct sunlight, drafts, or heat sources.
    - If using Smart Room Sensors, verify they are placed correctly and communicating with the S40.

- **Wi-Fi Connectivity Issues:**

    - Ensure your home Wi-Fi network is active and within range.
    - Restart your Wi-Fi router and the thermostat.
    - Verify correct Wi-Fi password entry during setup.
    - Consider using a Lennox Wireless Extender if signal strength is weak.

- **System Not Responding to Settings:**

    - Check system status messages on the thermostat display.
    - Ensure the system mode (Heat, Cool, Auto, Off) is correctly selected.
    - If connected to a communicating Lennox system, verify all components are powered and communicating.

- **Screen Brightness Issues:**

    - Adjust screen brightness settings in the thermostat's menu.
    - If automatic brightness is enabled, try disabling it and setting a manual level.

For further assistance, the Lennox Smart Technician app can provide diagnostic information, or you can contact your local Lennox dealer.

6. SPECIFICATIONS

Feature	Detail

Brand	Lennox
Model Name	Lennox S40 (22V24)
Product Dimensions	2.5"D x 7"W x 4.5"H
Controller Type	Amazon Alexa, Apple HomeKit, Control4, Google Assistant
Special Features	Auto Changeover, Fan Control, Filter Indicator, Geofence Technology, Programmable
Color	Black
Specific Uses	Air Conditioner, Furnace, Heat Pump
Temperature Control Type	Heating, Cooling
Connectivity Technology	Wi-Fi
Included Components	7" HD Display with 4-wire Connection, Mounting Kit (Screws, Anchors), Wall Plate
Power Source	24V AC
Voltage	22 Volts (Nominal 24V AC)
Display Type	LCD, Capacitive Touchscreen
Screen Size	7 Inches
Screen Resolution	1280 x 800
Control Method	App, Remote, Touch
Mounting Type	Wall Mount
Backlight	Yes
Item Weight	1.68 pounds

7. WARRANTY INFORMATION

The Lennox S40 Smart Thermostat comes with a **10-year warranty** covering manufacturing defects or malfunctions.

Important Warranty Condition: To maintain the validity of this warranty, it is mandatory to have the thermostat installed by a **certified HVAC installer**. Installation by a non-professional HVAC installer may void the warranty. Products not professionally installed are also non-returnable and non-refundable.

Instructions for warranty registration are included in the product packaging.

8. SUPPORT AND CONTACT

For technical support, service, or further inquiries regarding your Lennox S40 Smart Thermostat, please contact your local authorized Lennox dealer. They are equipped to provide expert assistance, diagnostics, and maintenance services for your system.

You can also utilize the Lennox Smart app for remote monitoring and to share diagnostic information with your dealer.

9. VIDEO RESOURCES

9.1 Lennox Smart Thermostat S40 (22V24) Overview

Your browser does not support the video tag.

Video 1: Official overview of the Lennox S40 Smart Thermostat, highlighting its features and benefits for home comfort and system control.