Emerson ST76W

Emerson Sensi Touch 2 Smart Thermostat (ST76W) User Manual

Model: ST76W

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Emerson Sensi Touch 2 Smart Thermostat. Designed for ease of use and energy efficiency, this thermostat allows you to control your home's comfort from anywhere using its touchscreen display or the Sensi mobile application.

The Sensi Touch 2 thermostat is compatible with most HVAC systems requiring a common wire (C-wire) and integrates with popular smart home platforms like Amazon Alexa and Google Assistant.

The Sensi Touch 2 Smart Thermostat features a clear, intuitive touchscreen display.

WHAT'S IN THE BOX

Verify that all components are present before beginning installation:

- Sensi Touch 2 Thermostat
- Mounting Hardware (screws and anchors)
- Installation Guide
- Owner's Manual (this document)
- Warranty Booklet

Included components for installation.

COMPATIBILITY REQUIREMENTS

The Sensi Touch 2 Smart Thermostat is designed for 20-30 VAC systems. It is compatible with most conventional heating and cooling systems, including:

- Single-stage and multi-stage conventional systems (gas, oil, propane furnace, electric furnace, boiler/radiant, air conditioner)
- Heat pump systems (with or without auxiliary heat)

C-Wire Requirement: A common wire (C-wire) is required for all Sensi Touch 2 installations to provide continuous power to the thermostat. If your current thermostat wiring does not include a C-wire, professional installation or the use of a Sensi C-wire adapter (sold separately) may be necessary.

Incompatible Systems:

- Line voltage systems (typically have thick wires, 120V or 240V)
- Millivolt systems (operate on very low power, less than one volt)
- Communicating/Proprietary systems

Conventional systems include boiler, gas furnace, radiant heat, electric heat and air conditioning. Heat pump systems include heat pump, dual fuel, geothermal

Sensi thermostat is not compatible with line voltage systems. A line voltage thermostat will typically have wires larger than 18 gauge and may not have terminal labels. If you're unsure of your system voltage, you or a contractor should measure voltage using a multimeter. Sensi thermostat is rated for 20-30 VAC.

Sensi thermostats are not compatible with millivolt system. A millivolt (mV) system operates on very low power, less than one volt. Sensi is designed for 20-30 VAC systems.

	Sensi Lite smart thermostat	Sensi smart thermostat	Sensi Touch 2 smart thermostat	Sensi Touch smart thermostat
System Type / Stages	Single (1H/1C), Multi-Stage (1H/2C, 2H/1C), Heat Pump (2H/1C)	Single 1H/1C, Multi-Stage 2H/2C, Heat Pump 4H/2C	Single 1H/1C, Multi-Stage 2H/2C, Heat Pump 4H/2C	Single 1H/1C, Multi-Stage 2H/2C, Heat Pump 4H/2C
Terminals*	R, O/B, Y, G, W/E, C	RC, RH, C, W/E, W2/*, Y, Y2/*, O/B/2, G, L	RC, RH, C, Y, Y2/*, W/E, W2/*, G, O/B, ACC+, ACCP	RC, RH, C, W/E, W2/*, Y, Y2/*, O/B/6, G, L
C-Wire	Not required for most systems	Not required for most systems	Required for all systems	Required for all systems

Refer to the compatibility chart to ensure your HVAC system is supported.

SETUP AND INSTALLATION

The Sensi app provides step-by-step guidance for installation. It is recommended to use the app for the most accurate and personalized instructions.

1. Download the Sensi App

Download the Sensi app from the Apple App Store or Google Play Store on your smartphone or tablet.
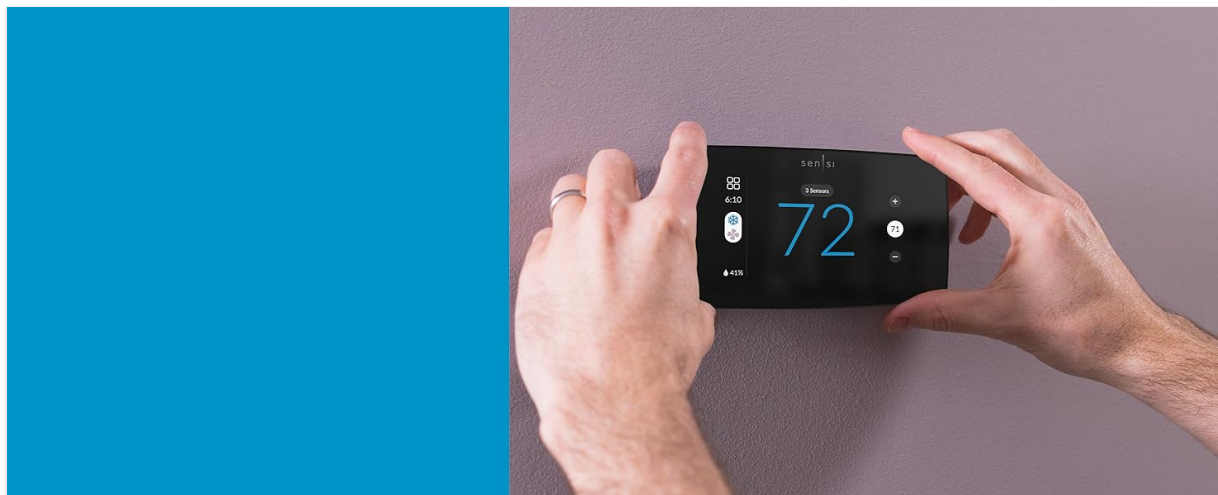
2. Power Off HVAC System

Before beginning any wiring, turn off the power to your heating and cooling system at the circuit breaker.

3. Remove Old Thermostat

Carefully remove your old thermostat's faceplate. Take a picture of the wiring connections for reference. Disconnect the wires and remove the old mounting plate.

4. Install Sensi Mounting Plate

Mount the Sensi backplate to the wall using the provided screws and anchors. The thermostat has a built-in level for easy alignment.

The Sensi app guides you through the installation process, including mounting the backplate.

5. Wire the Thermostat

Connect the wires to the corresponding terminals on the Sensi backplate. Refer to the picture you took of your old thermostat's wiring and the Sensi app's instructions. Ensure the C-wire is connected.

6. Attach Thermostat Faceplate

Once wiring is complete, snap the Sensi Touch 2 faceplate onto the mounting plate.

7. Restore Power and Connect to Wi-Fi

Turn the power back on to your HVAC system. Follow the on-screen prompts on the thermostat and in the Sensi app to connect your thermostat to your home's Wi-Fi network. The app uses Bluetooth technology for initial setup.

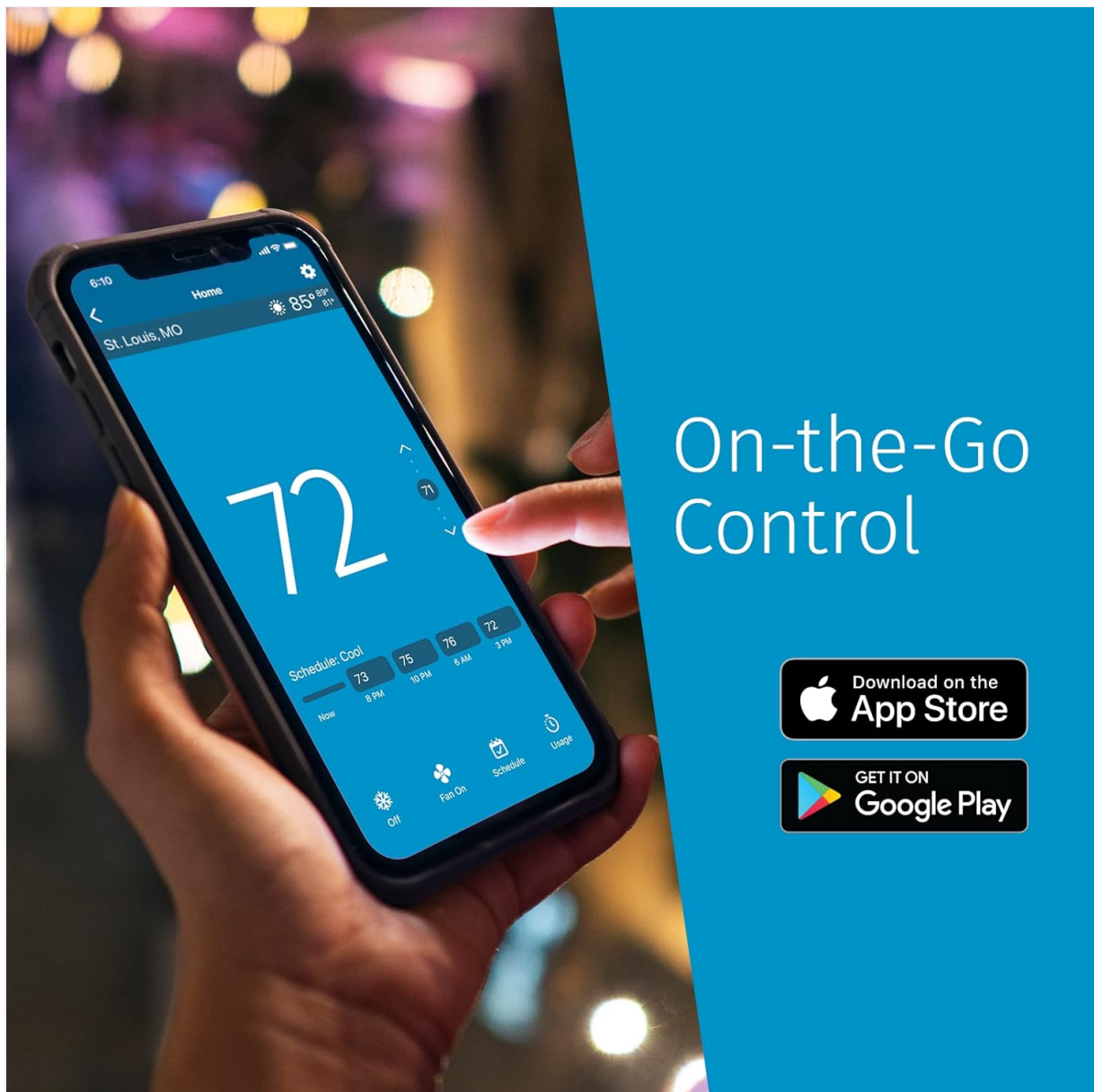## OPERATING YOUR THERMOSTAT

Manual Control

You can adjust the temperature directly on the thermostat's touchscreen. Use the '+' and '-' buttons to set your desired temperature. The display shows the current temperature, set temperature, and system mode.

Sensi App Control

The Sensi app provides full remote control and advanced features:

- **Remote Access:** Adjust settings from anywhere.
- **Flexible Scheduling:** Create custom 7-day heating and cooling schedules to optimize comfort and energy savings.
- **Geofencing:** Utilize location-based temperature control to automatically adjust settings when you leave or return home.
- **Usage Reports:** Monitor your HVAC energy consumption.

Control your Sensi thermostat remotely using the mobile app.

Room Sensors (Sold Separately)

The Sensi Touch 2 is compatible with Sensi Room Sensors. These sensors help balance temperatures across different areas of your home by providing additional temperature readings. You can average temperatures or prioritize specific sensor locations for heating and cooling.

Sensi room sensors help maintain balanced temperatures throughout your home.

Smart Home Integration

Integrate your Sensi Touch 2 thermostat with:

- **Amazon Alexa:** Use voice commands to adjust temperature.
- **Google Assistant:** Control your thermostat with Google smart devices.
- **Samsung SmartThings:** Connect for broader home automation.

MAINTENANCE

Smart Maintenance Features

The Sensi app provides smart maintenance features to help monitor your HVAC system's performance:

- **Usage Reports:** Detailed reports on heating and cooling run times.
- **Equipment Alerts:** Notifications regarding potential system issues.
- **Maintenance Reminders:** Timely reminders for tasks like filter replacement.

Cleaning the Thermostat

To clean the thermostat's touchscreen and casing, gently wipe with a soft, damp cloth. Avoid using

abrasive cleaners or solvents, as these can damage the finish and screen.

TROUBLESHOOTING

If you encounter issues with your Sensi Touch 2 Smart Thermostat, consider the following common solutions:

- **No Power to Thermostat:** Ensure the C-wire is properly connected and the power to your HVAC system is on at the circuit breaker.
- **Wi-Fi Connectivity Issues:**
  - Verify your home Wi-Fi network is operational.
  - Ensure your router supports 2.4 GHz Wi-Fi (Sensi thermostats primarily use 2.4 GHz).
  - Try rebooting your Wi-Fi router and the thermostat.
  - If using a combined 2.4/5.0 GHz network, consider creating a separate 2.4 GHz network if issues persist.
- **Room Sensor Not Connecting:** Ensure the room sensor is within range of the thermostat and has fresh batteries. Allow a few minutes for the sensor to pair after initial setup.
- **Inaccurate Temperature Readings:** Ensure the thermostat is not exposed to direct sunlight, drafts, or heat sources that could affect its internal sensor.
- **System Not Responding to Commands:** Check wiring connections at the thermostat and HVAC system. Ensure the correct system type is selected in the Sensi app settings.

For further assistance, refer to the Sensi app's help section or contact customer support.

SPECIFICATIONS

Feature	Detail
Model Name	Sensi Touch 2
Model Number	ST76W
Product Dimensions	0.77"D x 5.6"W x 3.25"H
Item Weight	9.92 ounces
Voltage	24 Volts (AC)
Display Type	LCD Touchscreen
Connectivity Technology	Bluetooth, Wi-Fi (2.4 GHz)
Control Type	Touch, Voice (via smart assistants)
Compatible Smart Home Platforms	Amazon Alexa, Google Assistant, Samsung SmartThings
Special Features	Data Privacy, Easy DIY Install, Smart Maintenance, Title 24 Compliant, Works with room sensors
Energy Certification	ENERGY STAR Certified

Physical dimensions of the Sensi Touch 2 Smart Thermostat.

WARRANTY INFORMATION

The Emerson Sensi Touch 2 Smart Thermostat comes with a 3-year limited warranty. Please refer to the included Warranty Booklet for full terms and conditions, including details on coverage and how to make a claim.

CUSTOMER SUPPORT

For technical assistance, troubleshooting, or warranty inquiries, please visit the official Sensi website or contact Emerson customer support. Contact information can typically be found in the Sensi app or on the Emerson website.