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- › [Google Nest Learning Thermostat \(4th Gen, 2024\) with Nest Temperature Sensor - Energy Saving Smart Thermostat - Works with Alexa, Apple HomeKit and Google Home App - Polished Obsidian User Manual](#)

## Google CE911542

# Google Nest Learning Thermostat (4th Gen, 2024) User Manual

Brand: Google | Model: CE911542

### INTRODUCTION

The Google Nest Learning Thermostat (4th gen) is Google's smartest, most advanced thermostat yet. It is designed to help you save energy while keeping your home comfortable. This manual provides comprehensive instructions for setting up, operating, and maintaining your new thermostat, along with important compatibility and troubleshooting information. The Nest Learning Thermostat learns your temperature preferences and routine, adapting to your schedule to optimize energy usage. It also includes a Nest Temperature Sensor for managing hot and cold spots in your home.

### WHAT'S IN THE BOX

# What's in the box.



Nest Learning  
Thermostat (4th gen)



Nest Temperature  
Sensor (2nd gen)



Thermostat base



Trim plate



Steel mounting plate

Mounting screws and wiring labels  
(not shown)

Figure 1: Included components - Nest Learning Thermostat (4th gen), Nest Temperature Sensor (2nd gen), Thermostat base, Trim plate, Steel mounting plate, Mounting screws and wiring labels (not shown).

- Nest Learning Thermostat (4th gen)
- Nest Temperature Sensor (2nd gen)
- Thermostat base
- Trim plate
- Steel mounting plate
- Mounting screws and wiring labels

- Quick Start Guide

## SETUP AND INSTALLATION

### Compatibility Check

Before purchasing or installing, ensure your existing HVAC system is compatible with the Google Nest Learning Thermostat. The thermostat works with most 24V systems, including gas, electric, oil, forced air, heat pump, and radiant. A C wire is not required for installation in most homes.

#### Compatible Systems

System type	Supported	Number of wires	Wiring
Single stage heating and cooling (with C-wire)	Yes	5	Y1, G, W1, R, C
Single stage heating and cooling (without C-wire)	Yes	4	Y1, G, W1, R
Boiler or furnace only (with C-wire)	Yes	3	W1 R, C
Boiler or furnace only (without C-wire)	Yes	2	W1 R
Cooling only (with C-wire)	Yes	4	Y1, G, R, C
Cooling only (without C-wire)	Yes	3	Y1, G, R
Heat Pump with Aux Heat (with C-wire)	Yes	5	Y1, G, OB, R, W1 (or W2/Aux), C
Heat Pump with Aux Heat (without C-wire)	Yes	5	Y1, G, OB, R, W1 (or W2/Aux)
Heat Pump with Alternate Heat (with C-Wire)	Yes	6	Y1, G, OB, R, W1 (or W2), C
Heat Pump with Multi-stage Alternate Heat (with C-Wire)	Yes	7	Y1, G, OB, R, W1, W2, C
Dual Transformer Heat and Cool	Yes	5	Y1, G, RC, RH, W1
Multi-stage Heating and Cooling	Yes	6	Y1, Y2, G, W1, W2, C
Multi-stage Heat pump with alternate heat	Yes	7	Y1, Y2, G, OB, R, W1, W2
Proprietary Heat and Cool (with adapter from OEM)	Yes	4	1, 2, 3, 4
Proprietary Heat and Cool (without adapter from OEM)	No	4	1, 2, 3, 4

Figure 2: Compatible Systems Chart. Refer to the Nest Compatibility Checker online for detailed information.

**Important:** The Nest thermostat isn't compatible with your system if your thermostat has stranded wires, has thick, stranded wires connected by wire nuts, or is labeled 110V or 120V. Do not connect the Nest Learning Thermostat to high voltage wires.

### Tools Needed

- #2 Phillips screwdriver

- Pencil
- Pliers (optional)
- Wire strippers (optional)
- Flashlight (optional)

## Installation Steps

The installation process is designed to be self-installed in approximately 40 minutes or less. The Google Home app will guide you through step-by-step instructions.

### Step 1: Download the Google Home App

Download the Google Home app from your device's app store. This app will guide you through the entire setup and installation process with helpful visuals and instructions.

# Control it in the Google Home app.

Change the temp or  
adjust the schedule  
from anywhere<sup>1</sup>

Control your thermostat  
and other compatible  
smart devices<sup>1</sup>

Works with any  
Matter-enabled  
smart home app<sup>6</sup>

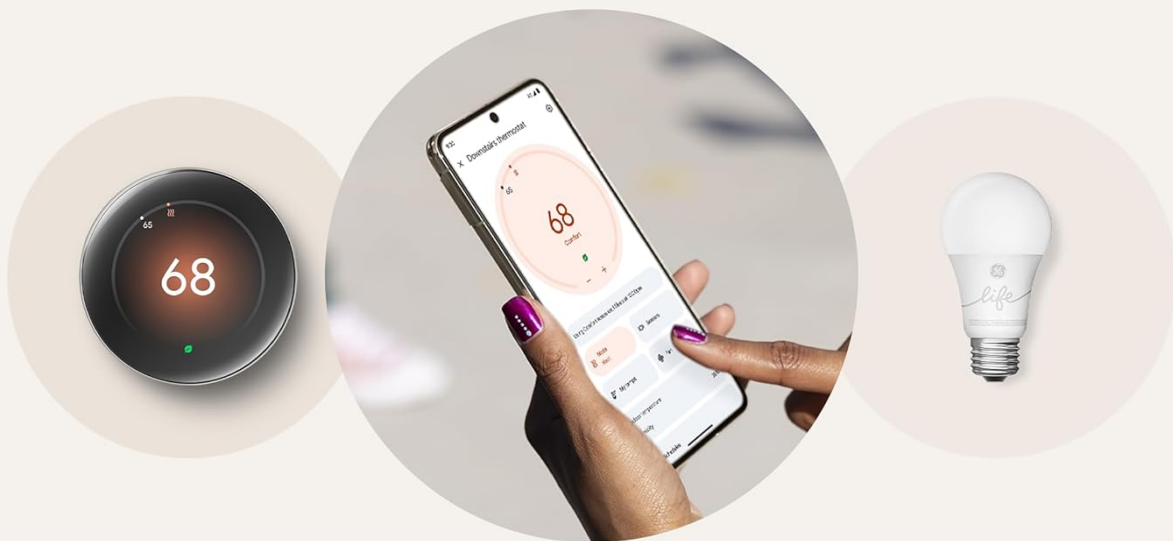


Figure 3: Control your thermostat and other compatible smart devices via the Google Home app.

### Step 2: Turn Off Power at the Circuit Breaker

Locate your home's circuit breaker box and turn off the power to your HVAC system. This protects you and your equipment during installation. Ensure your old thermostat is completely off by adjusting its temperature and waiting a few minutes to confirm the system does not turn on.

### Step 3: Remove Current Thermostat Cover

Carefully remove the cover of your existing thermostat. Most covers simply pull straight off. Take a photo of the existing wiring before disconnecting any wires for future reference.

### Step 4: Disconnect and Label Existing Wires

Disconnect the wires from your old thermostat one by one. Use the provided labels (or create your own) to mark each wire according to its terminal on the old thermostat. This is crucial for correct re-connection.

### Step 5: Remove Old Thermostat Base Plate

Once all wires are disconnected and labeled, remove the old thermostat's base plate from the wall. Most are held in place by a couple of screws.

### Step 6: Attach New Nest Base Plate and Trim Plate

Gently pull the labeled wires through the center hole of the new Nest base plate. If using the trim plate (recommended to cover wall imperfections), place it behind the base plate. Use the included screws to firmly attach the base plate (and trim plate) to the wall. Use the built-in bubble level to ensure it's straight.

# It's easy to install yourself.

Designed to install  
in around 40  
minutes or less

Follow the step-by-step  
instructions in the  
Google Home app<sup>5</sup>

No additional wires  
are required for  
most homes<sup>5</sup>



Figure 4: Attaching the Nest thermostat base plate to the wall.

### Step 7: Connect Wires to Nest Base

### Step 7: Connect Wires to Nest Base

Following the wiring diagram provided by the Google Home app (or your photo from Step 3), connect each labeled wire to its corresponding terminal on the Nest base. Ensure each wire is fully inserted and the lever is pressed down to secure it.

### Step 8: Attach Nest Thermostat Display

Align the Nest thermostat display with the base plate and press it evenly along the entire edge until it clicks firmly into place.

### Step 9: Restore Power

Return to your circuit breaker box and turn the power back on to your HVAC system. Your Nest thermostat display should power on automatically. It may take a few moments to charge or update.

### Step 10: Complete Setup in Google Home App

Follow the remaining prompts in the Google Home app to complete the setup. This includes selecting your language, heat fuel source, heat delivery type, and setting up Home & Away Routines and presence sensing. The app will guide you through testing your system's power and features.

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Video 1: Official Google Nest installation guide. This video provides a visual walkthrough of the installation process.

## OPERATING YOUR THERMOSTAT

### Temperature Control

The Nest Learning Thermostat features a large, easy-to-read display. You can adjust the temperature directly on the device by rotating the outer ring. Pressing the display allows you to access a detailed menu for modes, settings, and more.



Figure 5: Nest Learning Thermostat display showing current temperature.

### **Learning Features and Smart Schedule**

The thermostat learns your preferred temperatures and daily routines. It can automatically adjust the temperature based on your habits, helping to save energy. The Smart Schedule feature adapts to your preferences over time, and you can adjust it from anywhere using the Google Home app.



# The schedule that programs itself.

Smart Schedule learns the temps you like<sup>1</sup>

Adjust the schedule from the Google Home app

It suggests small tweaks to help you save<sup>1</sup>

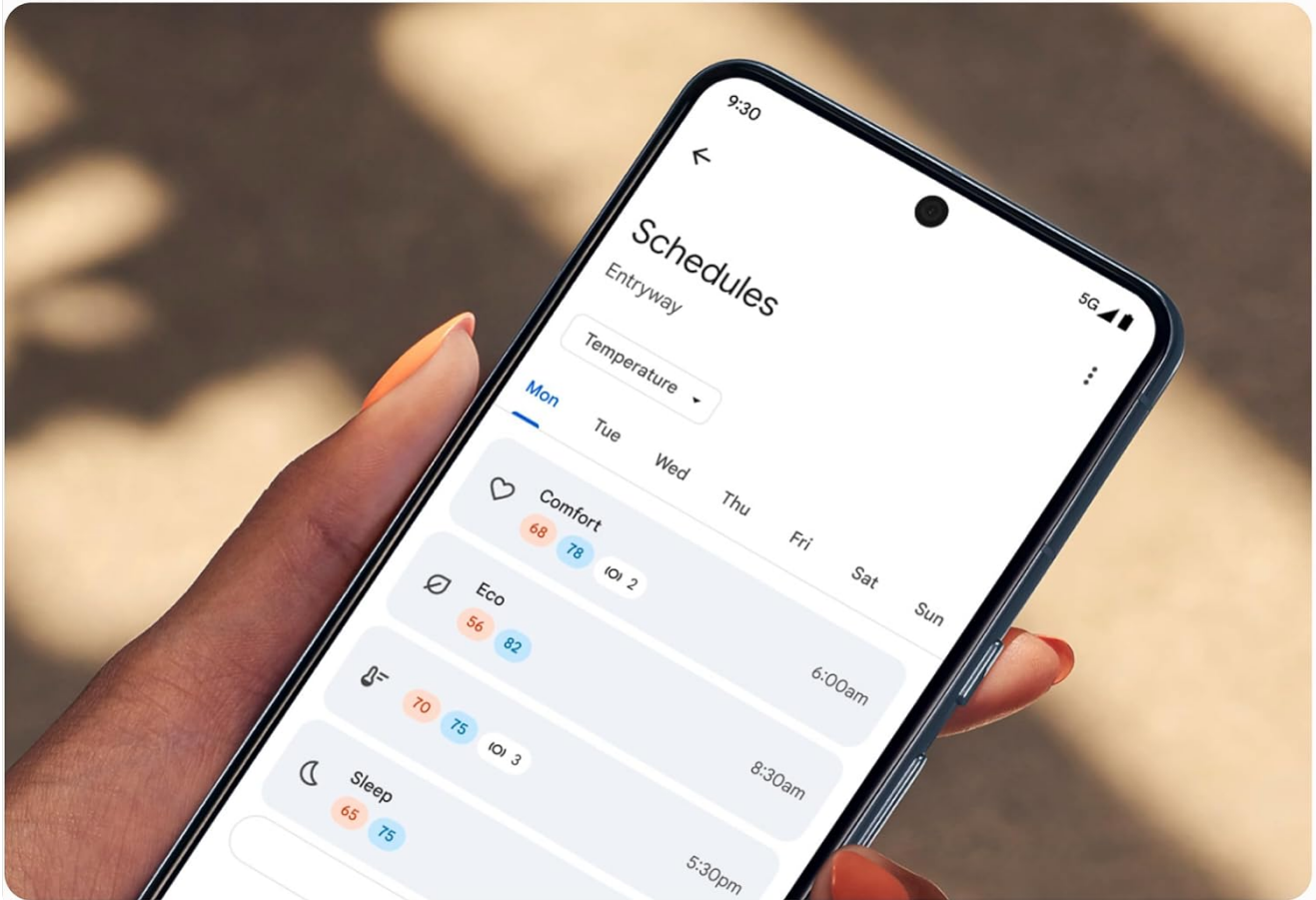


Figure 6: The Google Home app allows you to view and adjust your thermostat's schedule.

## Energy Saving Features

The Nest Learning Thermostat includes features like Adaptive Eco, which uses outdoor temperature to find energy-saving temperatures when you're away, and Natural Heating and Cooling, which pauses your system when outdoor conditions can naturally regulate your home's temperature.



# Saves energy while you're away.

Adaptive Eco finds an energy-efficient temp for your home<sup>1</sup>

It sets itself to an Eco temp when you leave

Helps make sure your home is comfy when you get back



Figure 7: Adaptive Eco mode helps save energy while you're away.

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Video 2: Google Nest Learning Thermostat (4th gen) overview, highlighting smart features and energy savings.

## Smart Home Integration

The thermostat works with Alexa, Siri, and Google Assistant smart speakers for voice control. It is also Matter compatible for simple integration into your broader smart home ecosystem.

## MAINTENANCE

The System Health Monitor helps catch many issues early and can send an alert if something needs attention. It also reminds you to change the air filter and other maintenance tasks.

# Looks out for your whole system.

System Health Monitor helps  
catch many issues early<sup>4</sup>

If something needs attention,  
it can send an alert<sup>4</sup>

Reminds you to change  
the air filter and more<sup>4</sup>

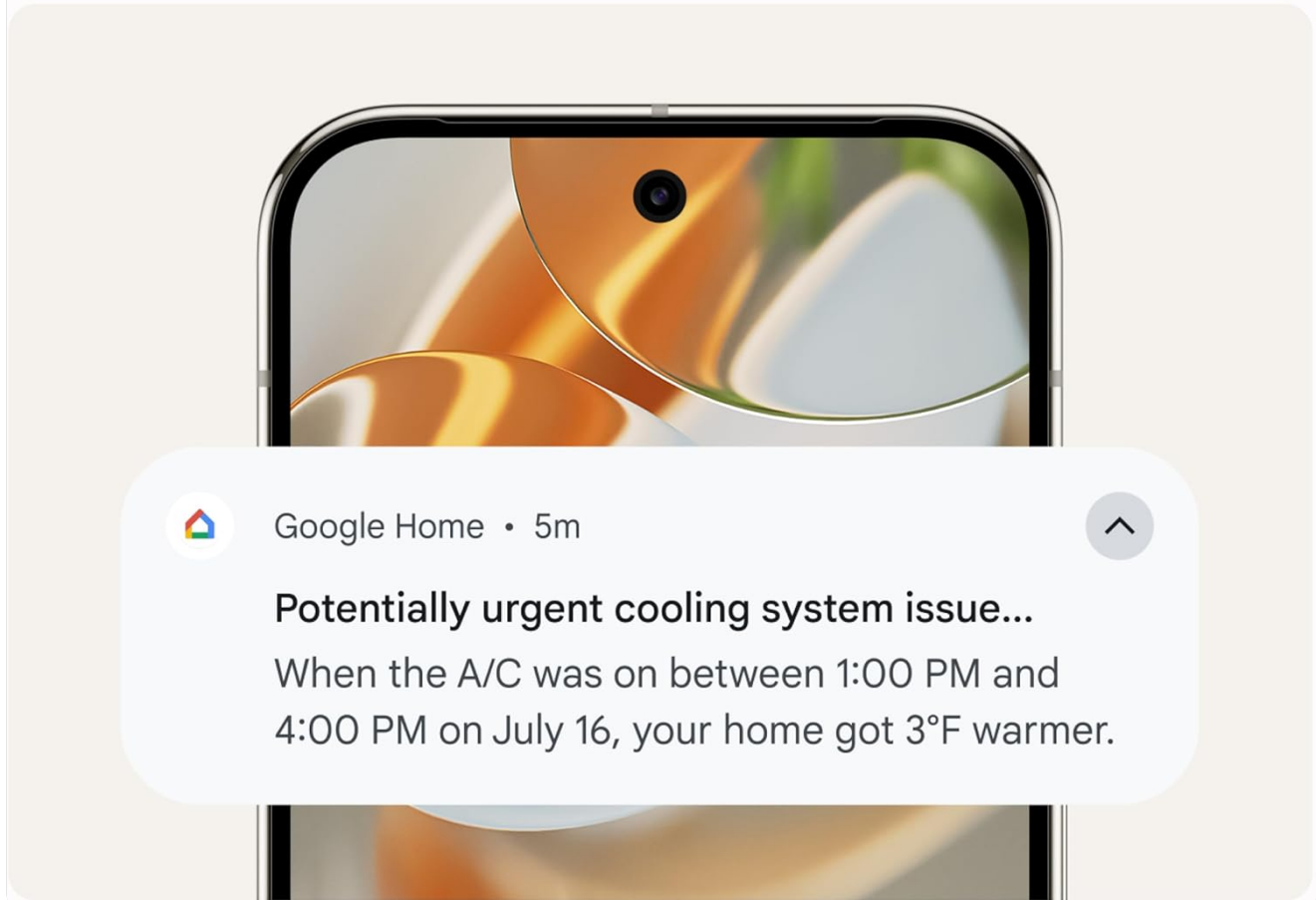


Figure 8: System Health Monitor alerts in the Google Home app.

## TROUBLESHOOTING

If you encounter issues, first check the Google Home app for diagnostic information. Ensure all wires are securely connected to the correct terminals. If the display does not power on after installation, ensure power is restored at the circuit breaker and allow a few minutes for the thermostat to charge.

For further assistance, visit the Google Nest support website or contact customer service.

## SPECIFICATIONS

Feature	Detail
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Brand	Google
Model Name	Google Nest Learning Thermostat (4th Gen)
Product Dimensions	0.04"D x 0.15"W x 0.15"H
Controller Type	Apple HomeKit, Google Assistant, Amazon Alexa, iOS, Android
Special Feature	Temperature Display, Auto Away Mode, Auto Scheduling
Color	Polished Obsidian
Power Source	Battery Powered (1 CR2 battery included)
Voltage	24 Volts
Material	Aluminum
Display Type	Touchscreen

### WARRANTY AND SUPPORT

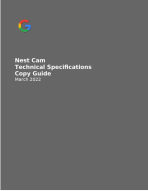


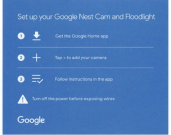

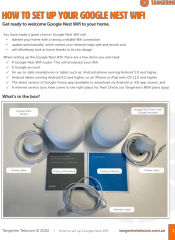
Protection plans are available for your Google Nest Learning Thermostat. Please refer to the product listing for details on 3-Year and 4-Year Protection Plans.

For additional support, visit the [Official Google Store on Amazon](#) or the Google Nest support website.

### LEGAL DISCLAIMERS

Please refer to the "Legal" section in the product's official documentation for all applicable legal disclaimers denoted by bracketed numbers in the product features (e.g., [1], [2], etc.).

### Related Documents - CE911542

	<p><a href="#">Google Nest Cam Technical Specifications and Copy Guide</a></p> <p>Comprehensive technical specifications, features, and update history for the Google Nest Cam, detailing its video, audio, connectivity, power, and environmental resistance capabilities.</p>
	<p><a href="#">Google Nest Thermostat User Manual: Setup and Included Components</a></p> <p>User manual for the Google Nest Thermostat, covering setup with the Google Home app, included accessories, and support resources. Learn how to install and get help for your smart home thermostat.</p>
	<p><a href="#">Google Nest Cam Setup Guide</a></p> <p>A concise guide to setting up your Google Nest Cam, detailing included components and support resources.</p>
	<p><a href="#">Google Nest Cam and Floodlight Setup, Safety, and Warranty Guide</a></p> <p>Comprehensive guide for setting up, installing, and understanding the safety, warranty, and regulatory information for the Google Nest Cam with Floodlight.</p>
	<p><a href="#">Google Nest Wifi: Setup, Safety, Warranty, and Regulatory Guide</a></p> <p>Comprehensive guide for Google Nest Wifi, covering setup instructions, safety precautions, regulatory compliance, and the limited warranty for the USA and Canada. Includes model details and support information.</p>
	<p><a href="#">How to Set Up Your Google Nest Wifi Router</a></p> <p>A step-by-step guide to setting up your Google Nest Wifi router for a seamless home Wi-Fi experience. Learn about connecting the router, using the Google Home app, and optimizing your network.</p>