

NEST THERMOSTAT E INSTALLATION GUIDE



ENERGY EFFICIENCY
PROGRAMS

Compatibility

The Nest Thermostat E works with most 24V systems, including forced air, variable speed, heat pump and radiant systems, as well as common fuel types such as natural gas, electricity and oil. It can control:

- » Heating and cooling: one stage of heating and cooling, and a second stage of either heating or cooling
- » Heat pumps: with auxiliary and emergency heat
- » Fans: one speed

You can check your system's compatibility at nest.com/works

Professional installation is recommended for dual fuel systems (heat pump with furnace)

Watch the video

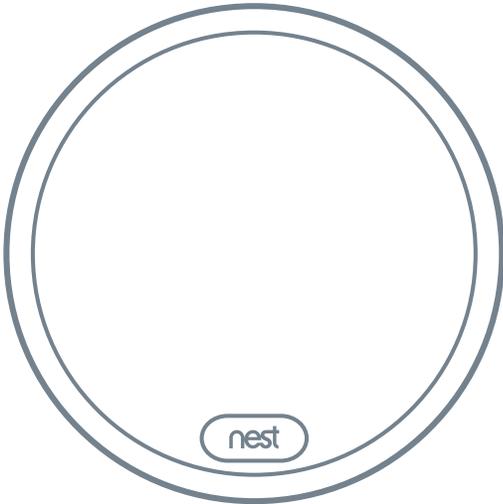
To see an overview of how to install the Nest Thermostat E, visit support.nest.com/thermostat-e

¿Prefieres leer esto en español? Visita nest.com/es-guide

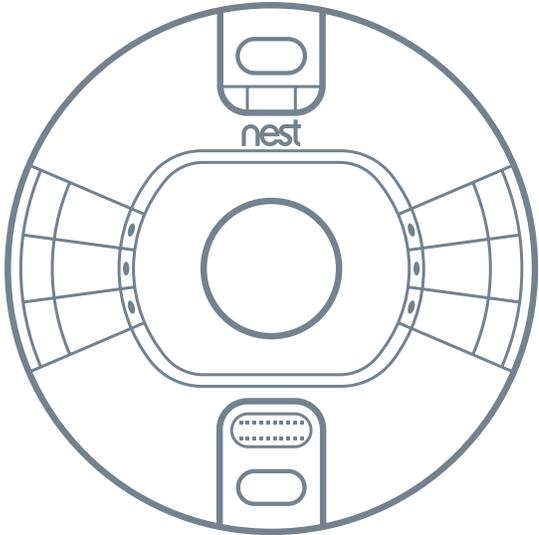
Don't want to install your Nest Thermostat E yourself?

The Nest Thermostat E is designed for DIY installation, but you can also hire a Nest Pro to do it for you. They'll take care of installation and make sure everything's up and running. Go to nest.com/install to find a Nest Pro installer near you.

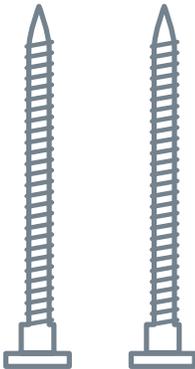
In the Box



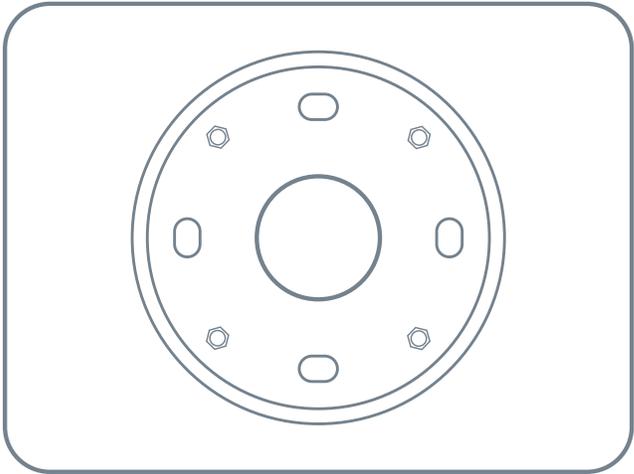
Display



Base



Wall Screws



Trim Plate

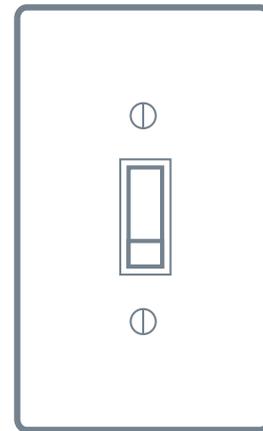
1. Switch off power

This protects you and avoids blowing a fuse in your equipment. To make sure the power is off, change the temperature with your current thermostat and wait at least five minutes to be sure that your system doesn't turn on.



Breaker Box

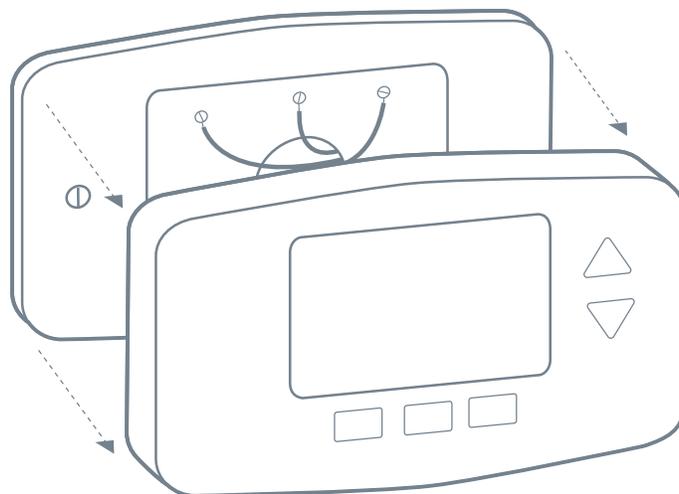
or



System Switch

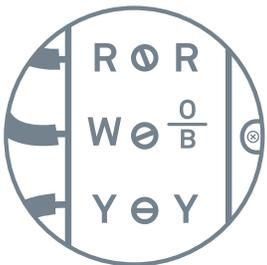
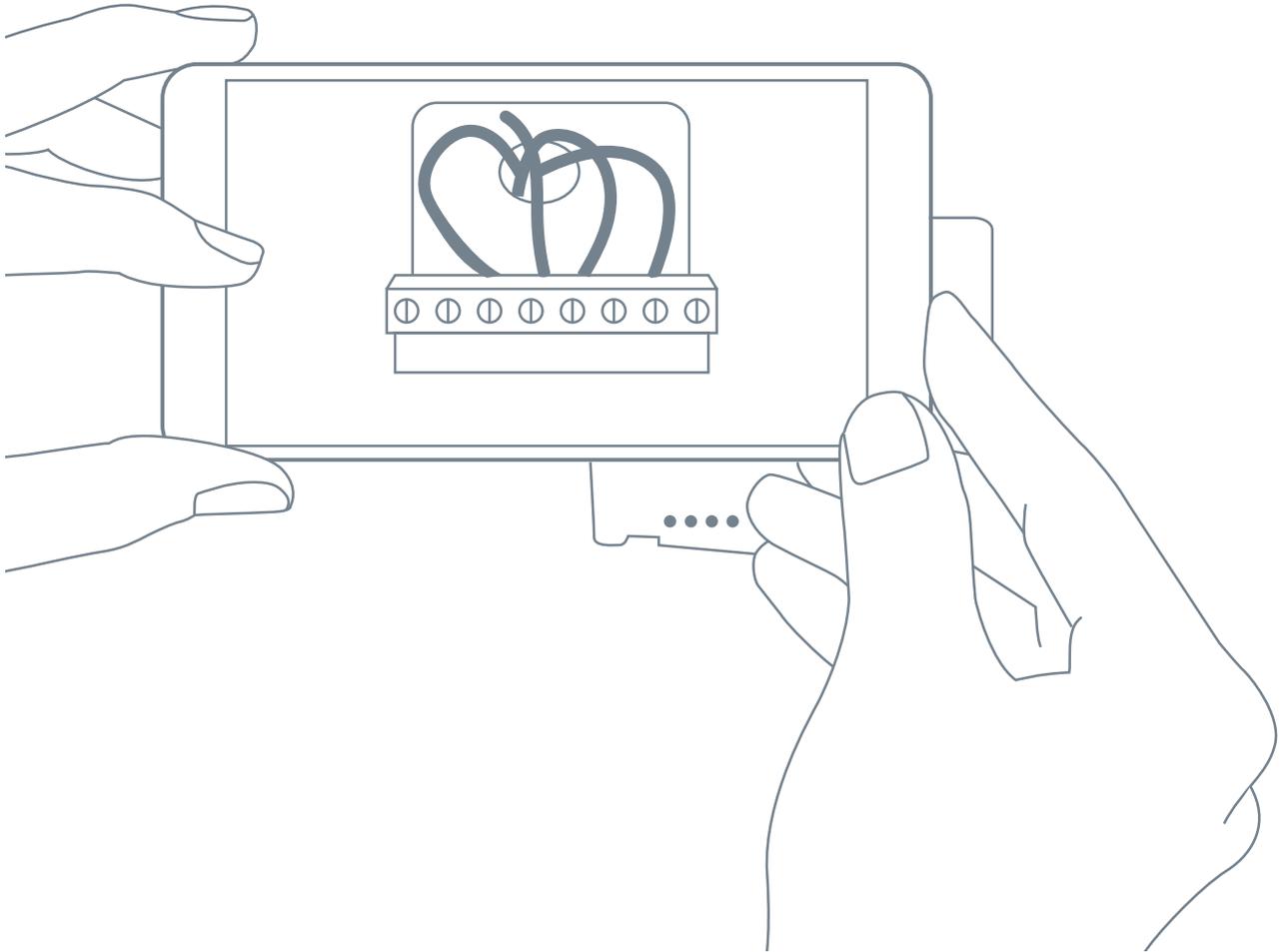
2. Remove the cover

Some thermostat covers pop off, while others need to be unscrewed. Older thermostats may have a second plate that should also be removed to expose the wires.



3. Take a picture of the wires

Take a picture of your thermostat's wires and save it for reference. Make sure you can read the wire terminal labels.

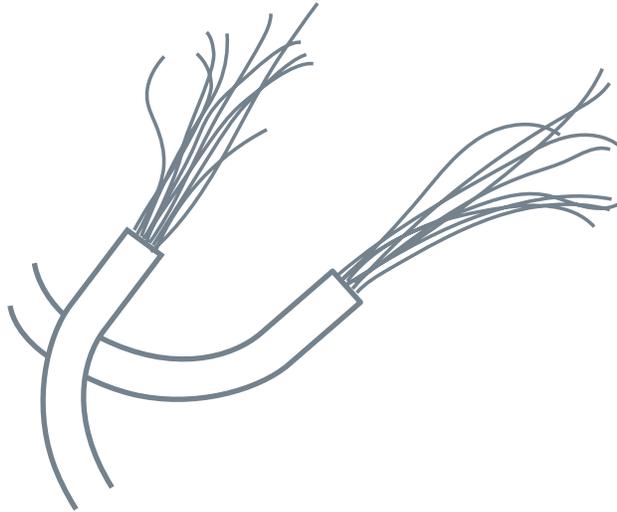


IMPORTANT: If there are two labels on your thermostat's wire connectors, go to nest.com/labels for detailed help and instructions.

Incompatible wiring and voltage

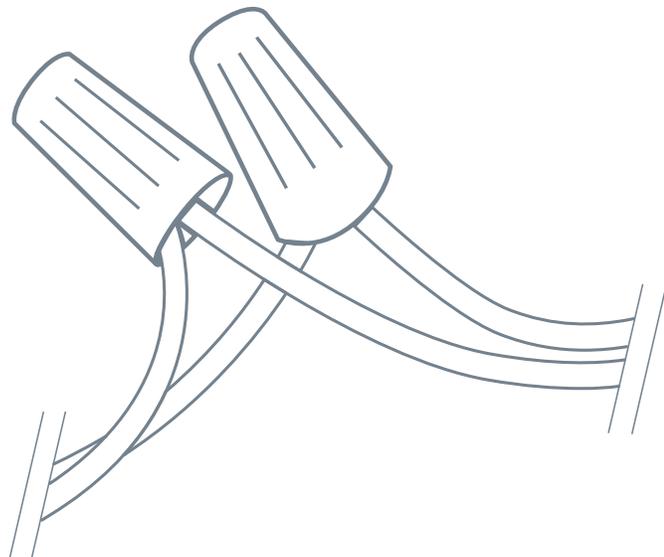
Stranded wires

Stranded wires aren't compatible with the Nest Thermostat.



High-voltage wires

If your thermostat is labeled 120V or 240V, or has thick wires with wire nuts, or has L1 and L2 terminal blocks, your system is high voltage and isn't compatible with the Nest Thermostat.



4. Use the compatibility checker

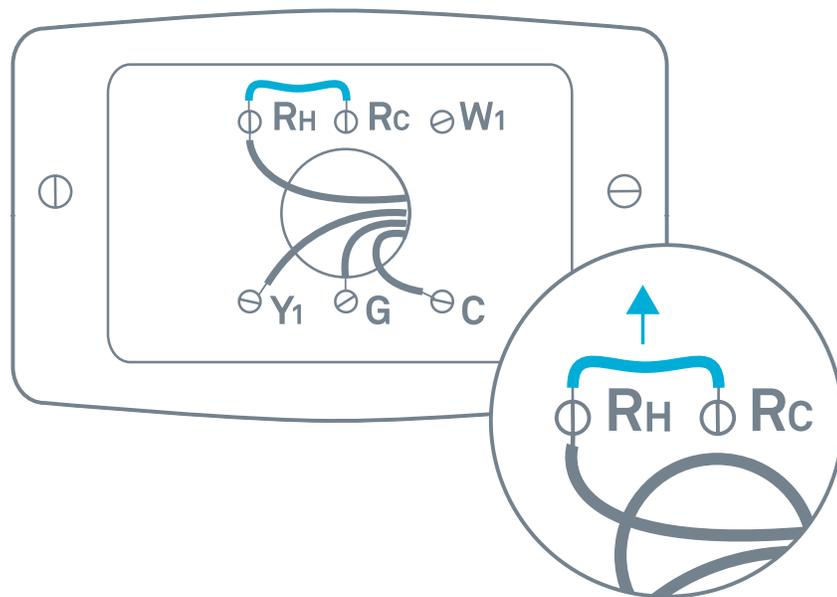
If you haven't already, go to nest.com/works and enter your thermostat's wires into the compatibility checker.

- » Enter only the connectors on your thermostat that have wires in them
- » Do not use wire colors – enter the connector labels
- » Do not enter any jumper wires into the checker (see step 5)

If your system is compatible, you'll get a custom wiring diagram that you will need to install your Nest Thermostat. You can print it or email it to yourself.

5. Remove any jumper wires

Jumper wires are short wires between two connectors. The Nest Thermostat doesn't need jumpers. If your thermostat has jumpers, remove them, but save them along with your old thermostat.

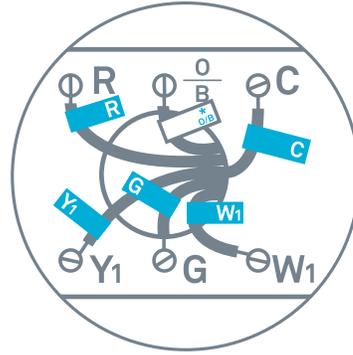


IMPORTANT: If you have Rh and Rc wires, you have a dual transformer system. The Nest Thermostat E is not compatible with dual transformer systems, but you may be able to use the 3rd generation Nest Learning Thermostat.

6. Label the wires

Peel off the labels below and attach them to the thermostat's matching wires.

Note: If you have an Rc or Rh wire, put the R label on it.



NOTE: To find the stickers, please see the installation guide that was included in the smart thermostat box.

Wiring tips

Wire colors can vary, but:

- » Common or C wires are generally **blue**.
- » If there's an **orange** wire in the connector labeled both W and O/B, then you likely have a heat pump. Put this wire in the Nest Thermostat's O/B connector.
- » If there's a **white** wire in the connector labeled both W and O/B, then you probably don't have a heat pump. Put this wire in the Nest Thermostat's W connector.

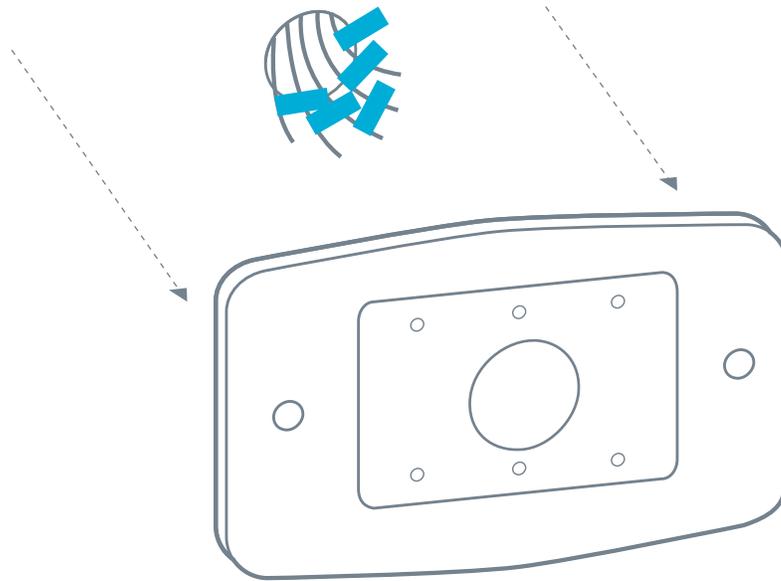
IMPORTANT:

If you're unsure about wiring your thermostat, go to nest.com/install to contact a Nest Pro in your area.

7. Disconnect wires and remove base

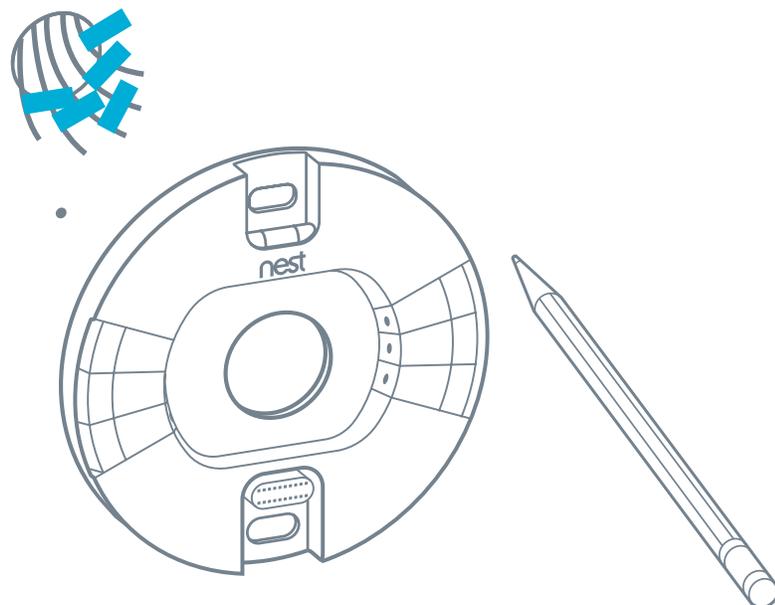
After removing the thermostat base, gently wrap the wires around a pen or pencil so they don't fall back into the hole in the wall.

Remember, the power to your HVAC system must be off to avoid blowing a fuse in your equipment.



8. Mark where screws will go

Use the built-in bubble level to make sure the base is level.

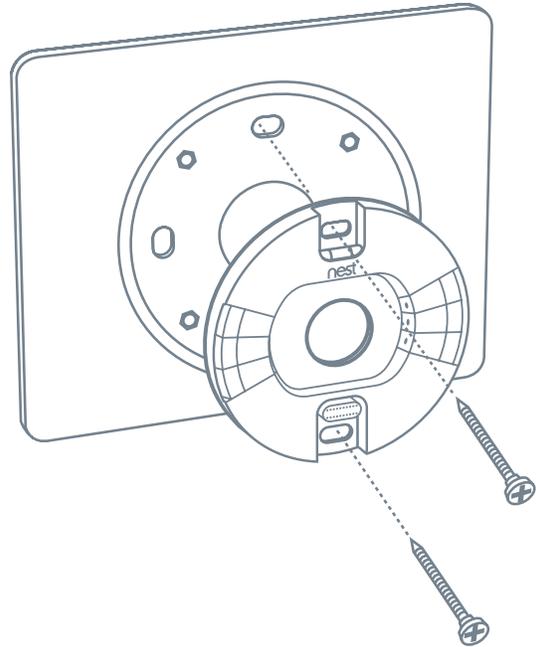


Optional in most homes

Use the included trim plate if needed

If you don't want to paint over holes or marks left by your old thermostat, you can use the optional trim plate.

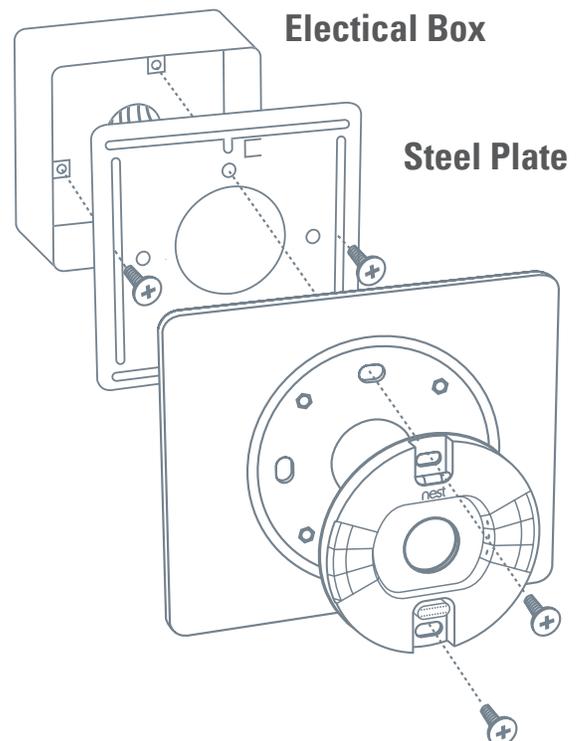
Snap the thermostat base and trim plate together, then screw the plate to the wall.



If you have an electrical box

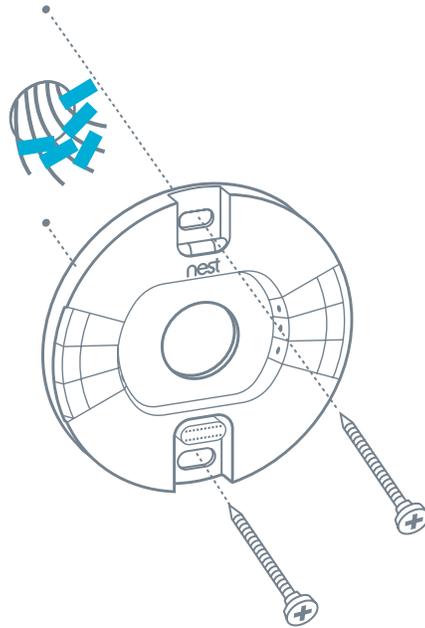
Electrical boxes aren't common, but if you have one, you'll need to purchase a steel plate and screws from [nest.com](https://www.nest.com) for installation.

Secure the steel plate to the electrical box with two of the screws. Use the other two screws to attach the Nest base and trim plate.



9. Install the Nest base

Pull the wires through the center of the base, then attach it to the wall with the screws.

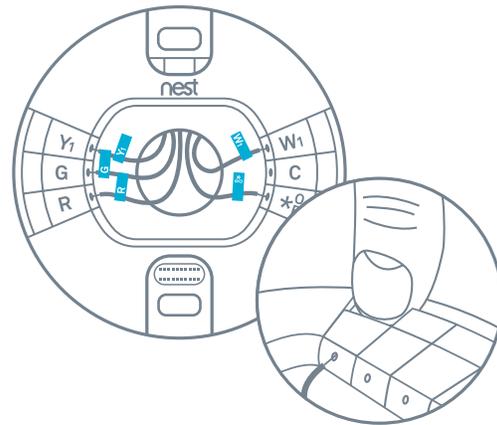


10. Connect wires

Use the wiring diagram you got from the compatibility checker in step 4 to connect your system wires to the Nest Thermostat.

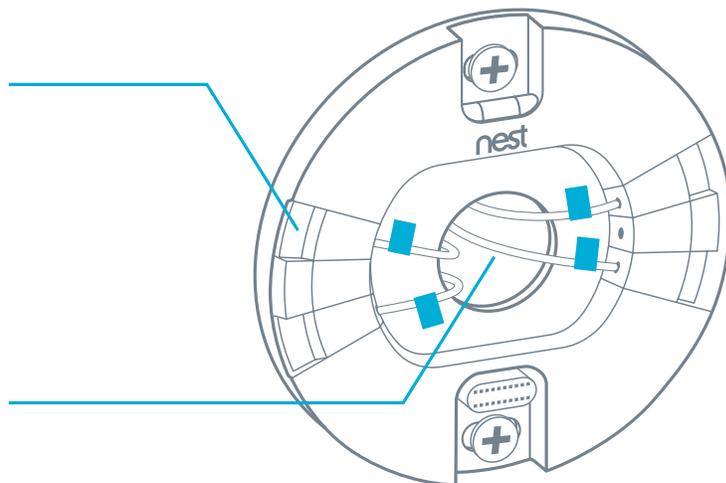
Note: If you have an R, Rc or Rh wire, you can put it into the R connector on the Nest Thermostat.

If you have a W2, Y2 or O/B wire, you can put it into the * O/B connector, if needed.



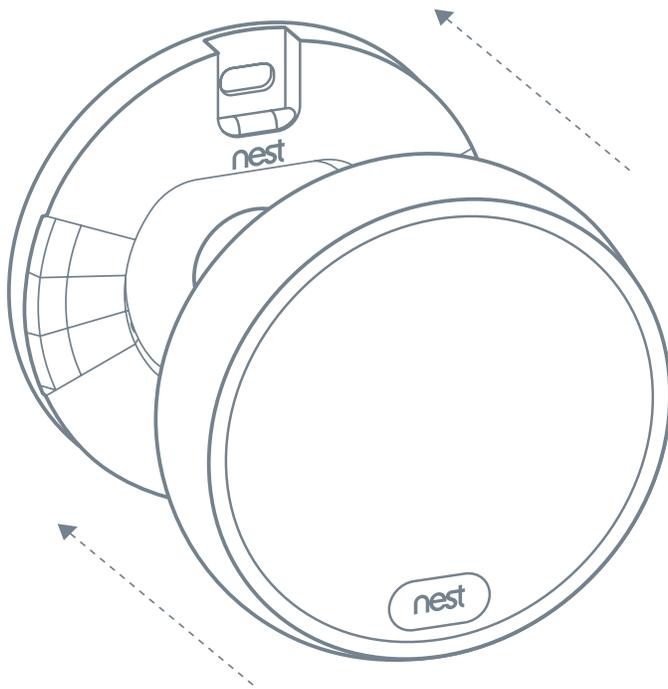
Gently tug each wire to check they're secure, and make sure each connector that has a wire stays down.

After all the wires are securely connected, push them down to make sure they're flush with the base.



11. Attach the display

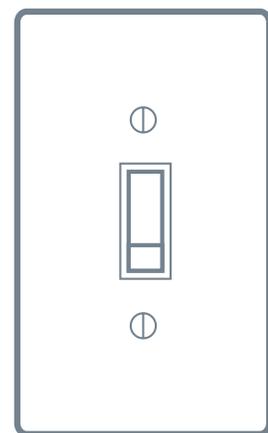
Push the display onto the base until it clicks.



12. Switch the power back on



or

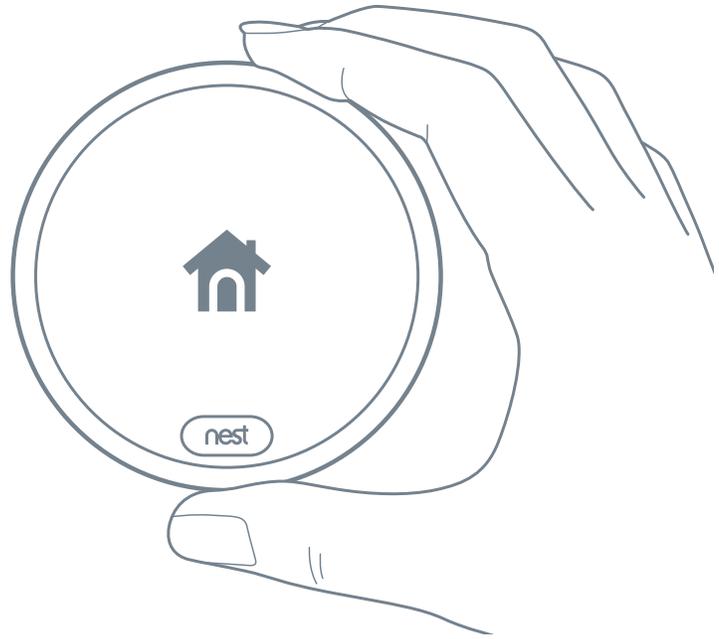


Breaker Box

System Switch

13. Setup

The Nest Thermostat will turn on and walk you through setup. You can select a language, connect it to Wi-Fi, and tell it some things about your home and system so it can help save energy. The Nest Thermostat doesn't have a touchscreen. Turn the thermostat display and press it down to select.



14. Control it with the Nest app

Download the free Nest app so you can control your thermostat with your phone. You'll also receive a monthly Home Report that shows your energy use. You can get the app on Google Play™ or the App Store®, or go to home.nest.com if you don't have a phone handy.

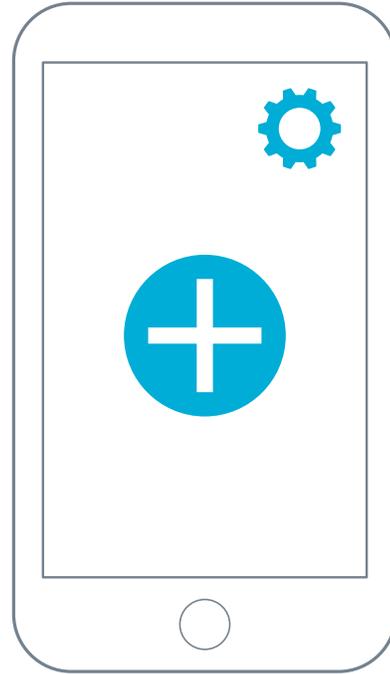


15. Add your thermostat to your account

If you're new to Nest, tap the plus sign on the app home screen, then select Nest Thermostat.

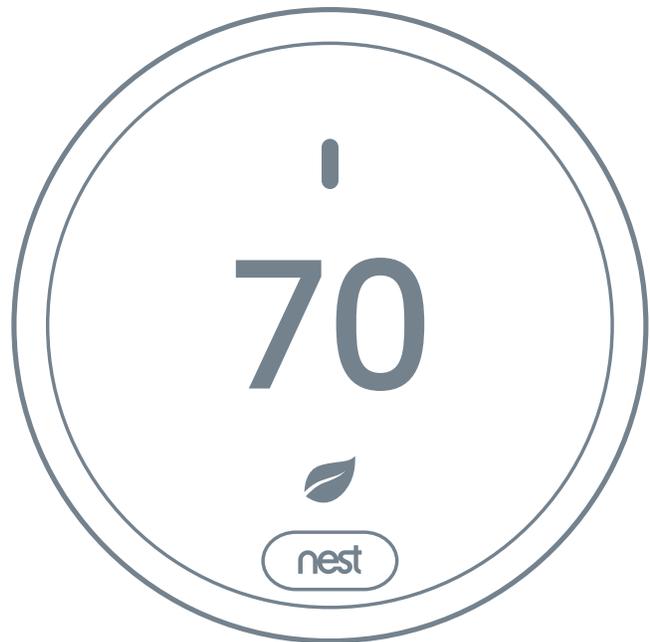
If you already have Nest products in your account, tap the Settings icon, then select thermostat.

The app will show you how to add your thermostat to your Nest Account. If you need help, visit nest.com/pair



Using your thermostat

Your thermostat can automatically start learning your schedule, or you can choose a schedule with preset times and temperatures. You can edit your schedule at any time. For help getting started, learning about Nest Thermostat features, energy saving tips and more, go to nest.com/thermostatbasics



For additional assistance or questions, please call: 1.877.475.4270
or go to AmerenIllinoisSavings.com/Smart.



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