

# Troubleshooting when Nest Cam disconnects or is offline in the Nest app

Affected products: Nest Cam Outdoor, Nest Cam Indoor, Dropcam Pro, Dropcam

Here are some steps you can take if your Nest Cam is offline, disconnects or has poor video quality. You may also see a yellow light on the front of your camera showing that there is an issue with your Wi-Fi connection.

If your Nest Cam is **Offline** in the Nest app, or you get a message saying that your Nest Cam was disconnected from the internet, follow these steps to get your camera back online.

If you are trying to troubleshoot a different Nest product, or all of your Nest products are offline follow this link:

## Troubleshooting Wi-Fi and connection issues

Affected products: Nest Thermostat, Nest Protect, Nest Cam Indoor, Nest app

If you're having trouble adding Nest products to your Nest Account, or your Nest products are offline or slow to respond, there may be an issue with your home Wi-Fi network. You may also see that your Nest products are offline in the Nest app.

**Click below for help with some common Wi-Fi and connection issues:**

### Troubleshoot your Nest Cam's Wi-Fi connection

#### **1. Make sure your home Wi-Fi is working**

Since all Nest cameras use your home Wi-Fi network, check that you can get online with another device in your home. You can visit [nest.com](https://nest.com) to check if your connection is working. If you're using a cell phone, make sure you don't use cellular data to test your connection.

**Tip:** To help make sure you're not using cellular data, turn on Airplane mode and then turn on Wi-Fi.

If you can't connect, try using a different device to double check. If you can't connect with any device, contact your internet service provider to check the service status in your area.

**2. Check the status of the Nest service** Click [here](#) to check the status of the Nest service.

If the Nest service is down, you may see your camera is **Offline**. You may also see **The Nest service can't be reached right now** in the Nest app.

Wait for the Nest service to resume to see if your camera comes back online.

**3. Check your Nest app version**

Make sure that you have the latest version of the Nest app on your phone or tablet. You can download it for free from the [Apple App Store](#) or [Google Play](#). To make sure you have the newest version, you can uninstall and reinstall the app.

**4. Restart your Nest Cam**

Restarting your camera will refresh your connection.

1. Unplug your Nest Cam's power adapter from the wall outlet.
2. Wait 10 seconds, then plug your Nest Cam's power adapter back in.
3. Your Nest Cam will restart automatically.

After restarting you should see a solid green light on the front of your camera to show that your Nest Cam is connected to your home Wi-Fi network.

If you see another color light or no light at all on the front of your Nest Cam, follow this link for more info:

[What the lights and sounds mean on Nest Cam >](#)

**Note:** If you have a Dropcam you'll see different lights on the front of your camera.

[What the lights mean on Dropcam HD or Dropcam Pro >](#)

**5. Restart your router**

Restarting your router will reset your internet connection. You should also restart any Wi-Fi range extenders or repeaters that you have.

Here's how to restart your router:

1. Unplug your modem and router power cords. You may have a combination modem/router, or they may be separate devices. All the lights on your modem and router should be off.
2. Wait for 30 seconds, then plug your modem and router back in.

3. Your modem and router will restart. Wait a couple of minutes or until you see steady power and connection lights. You may also see a quickly flashing data light.

**Note:** Every router is different. You may need to consult your router's user manual for specific instructions on how to restart your router.

Once your router finishes restarting, test the Wi-Fi connection with a computer or phone (make sure that cellular data is switched off).

## **6. Check if there's enough internet bandwidth**

Not having enough available bandwidth can cause connection issues with your Nest Cam.

[How much bandwidth Nest Cam video streaming uses >](#)

Check if other devices are interfering with your Nest Cam:

1. Run an internet speed test on your computer or mobile device (make sure you are using Wi-Fi not cellular data).
2. Temporarily disconnect other devices in your home from the internet, one at a time. You can do this by switching off Wi-Fi, unplugging ethernet cables, or by turning the devices off.
3. After disconnecting one of your devices, run another speed test to see if your internet connection now has more bandwidth available.
4. Check if your Nest Cam's video streaming has improved. Repeat steps 2 through 4 until all other devices in your home have been disconnected or your video has improved.

If connection quality improves, you may have to be more conscious of other devices on your network: Movie/music streaming and online gaming can take up a large chunk of your bandwidth. You can also contact your internet service provider to upgrade your connection so all your devices have enough bandwidth to share.

## **7. Check for interference**

Almost every network is subject to wireless interference which can cause your Nest Cam to disconnect from your home Wi-Fi network.

You may need to move your camera closer to your Wi-Fi router or access point or extend your network's range. For more information and steps to take to troubleshoot your wireless interference see the article below.

[What is wireless interference and how to troubleshoot it >](#)

**8. Check the settings on your Wi-Fi router or access point** Incompatible settings on your home Wi-Fi router or access point can cause your camera to disconnect or show up as **Offline** in the Nest app.

#### **Parental controls or firewall security**

High firewall security or parental controls can block communication with Nest servers. Refer to your Wi-Fi router/access point documentation to see if these feature is enabled on your network and how you can exempt your Nest Cam from these restrictions.

#### **Device priority (Quality of Service QoS)**

If your router has device priority enabled, it could be limiting the amount of bandwidth available for your Nest Cam and cause your camera to disconnect. Try moving your Nest Cam to a higher spot on your router's device priority list. Since each router is different, check the manual or contact the manufacturer for more information about QoS and how to check if it's enabled for your router.

To make sure you're using settings that allow your Nest Cam to connect, see the following article for recommended settings.

[Recommended Wi-Fi network and router settings for use with Nest products >](#)

#### **9. Check the incompatible list**

If after you check your router's settings your Nest Cam still wont connect to your home Wi-Fi network, check that your router or modem is not on the incompatible list.

**Note:** Even if your router is on the incompatible list, some incompatibility problems can be resolved by changing your router settings or by updating firmware.

[Some routers may cause issues with adding a product or Wi-Fi connections >](#)

# Learn about wireless interference and how to troubleshoot it

Affected products: Nest Thermostat E, Nest Protect, Nest Cam Outdoor, Nest Cam IQ indoor, Nest Cam Indoor, 3rd gen Nest Learning Thermostat, 2nd gen Nest Learning Thermostat, 1st gen Nest Learning Thermostat

If you're having trouble connecting Nest products or other wireless devices, or suffer from slow network communications or intermittent disconnections, here are detailed explanations about the causes and symptoms of wireless interference, along with troubleshooting tips.

Wireless interference typically comes from three sources: walls and floors blocking wireless signals, other Wi-Fi networks using the same channel as your own Wi-Fi network, and appliances and electronics emitting radio frequency interference. While your home Wi-Fi network and [Weave](#) may only be affected by one or two of these, almost every wireless network can be affected by all three types of interference.

## Symptoms of wireless interference

Most homes experience all three kinds of wireless interference, but symptoms can vary. Read below to see if your Nest product is experiencing any of the symptoms of wireless interference.

### Nest thermostat symptoms:

- Thermostat is **Offline** in the Nest app or disconnects from Wi-Fi.
- Thermostat responds slowly to changes with the Nest app.
- Missing Energy History with the Nest app.
- Difficulty adding your thermostat to your Nest Account.

### Nest Protect symptoms:

- No Data in [Protect History](#).
- Nest Protect is **Offline** in the Nest app.
- Difficulty adding your Nest Protect to your Nest Account.

### Nest Cam symptoms:

- Missing video history.
- Skipping, pixelated, or other [problems watching your video](#).
- Camera is **Offline** in the Nest app or disconnects from Wi-Fi.

## Troubleshooting wireless interference

Here are some quick tips for troubleshooting your home's wireless interference.

- Enable channel auto-switching on your router
- If possible, move your wireless access point/router
- If possible, move your Nest product closer to your access point/router
- Unplug other electronics that may be interfering with your connection
- Install a range-extender or repeater

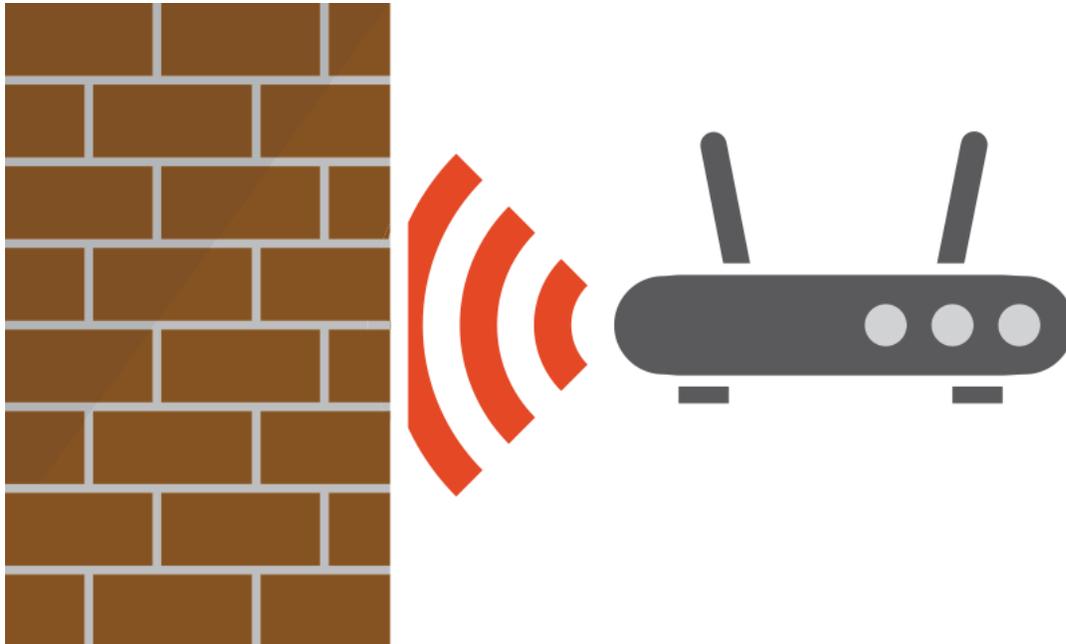
**Important:** If you use multiple access points on your network, such as a second router or range-extender, make sure that all of them use the settings recommended below. If they don't all use the same settings, they may not be able to connect to each other or your Nest products. It's a good idea to use access points and extenders that are made by the same manufacturer. This can improve the chances that your extender is compatible with your access point.

[Recommended Wi-Fi network and router settings for use with Nest products >](#)

**Note:** When troubleshooting wireless interference, test what works best for your home connection. Every network is different, and every home experiences unique difficulties caused by wireless interference.

Read below for more information on the three most common types of wireless interference and additional tips to help minimize interference on your home Wi-Fi network.

## 1. Interference from walls and floors



The construction materials in your home can greatly affect wireless communication speed and range. Materials such as wood and glass don't have much of an effect. However, denser

materials such as concrete, brick, and metal can make it difficult to connect. These denser materials can also slow your network speed or even completely block wireless signals from reaching certain parts of your home.

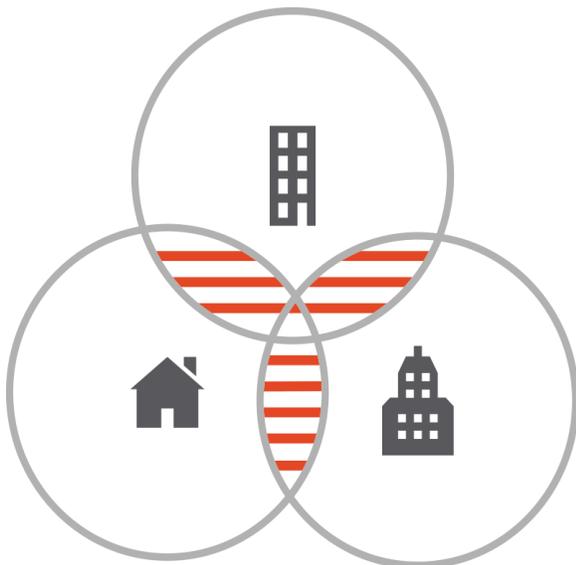
Large furniture items such as filing cabinets or bookshelves, as well as appliances like stoves or refrigerators, can also interfere with Wi-Fi.

### **Troubleshooting tips**

1. Some Wi-Fi routers or access points have adjustable antennas. Pointing the antenna to aim the signal at your Nest product can help improve your connection.
2. If possible, move your Nest product to a new location. Even just a few inches or a couple of feet can make a big difference in signal strength.
3. In some homes, moving your wireless router or access point is an option. Moving your router or access point closer to your Nest product can improve your connection.
4. Powerline adapters are another option, especially useful for larger homes with thick or dense walls and floors.
5. Another option is to add a Wi-Fi extender to your network. Extenders re-broadcast your router's signal from another room or location.

**Tip:** Powerline adapters use your home's electrical wiring for ethernet, so you can easily extend your network right through the walls without installing expensive new wiring. Connecting a powerline adapter to a Wi-Fi access point can bring a strong wireless connection to even the most remote rooms in your home.

## **2. Interference from competing Wi-Fi networks**



Interference from competing Wi-Fi networks is especially common in cities, apartment buildings and densely populated areas where there are usually many Wi-Fi networks nearby.

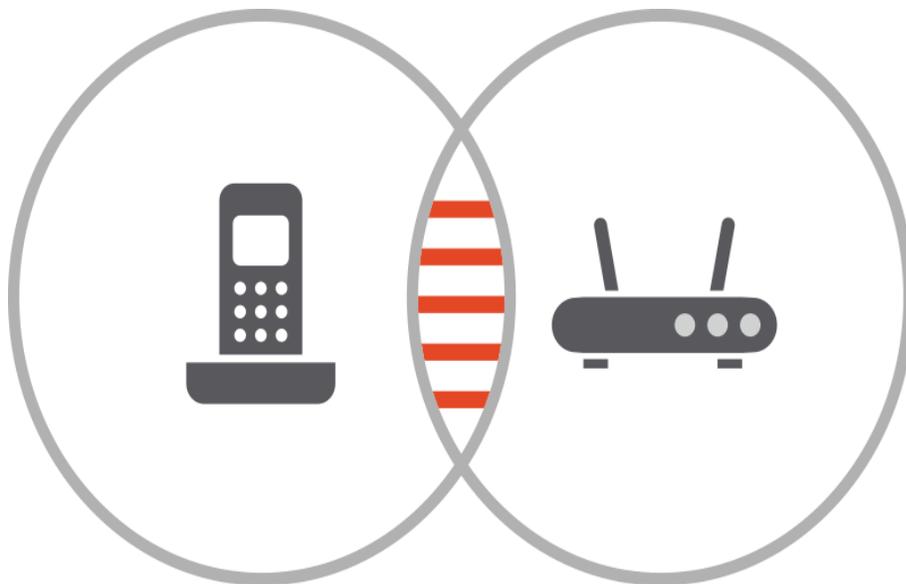
**Tip:** Check for competing networks by opening the wireless options on your phone or computer. Wait a moment for the list of networks to refresh. If you see there are lots of networks to choose from, you may experience this type of interference.

Wi-Fi networks broadcast on channels. When nearby Wi-Fi networks are set to use the same channel, they'll constantly be competing with each other for limited bandwidth.

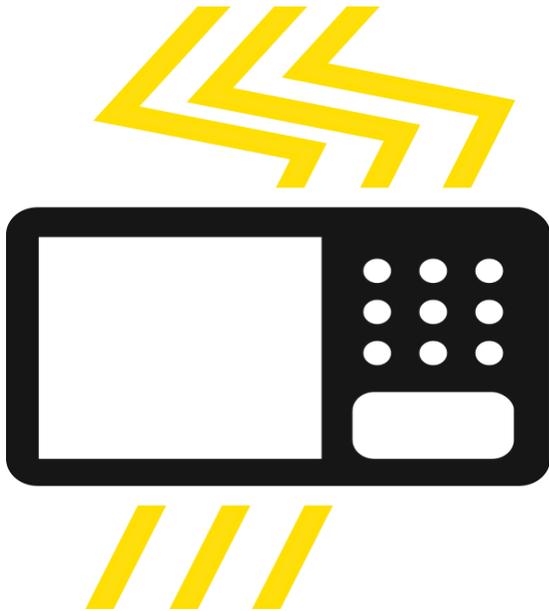
### **Troubleshooting tips**

1. Many of the latest routers have a feature that lets them automatically find the least crowded Wi-Fi channel. Check your router's documentation to find out how to enable and set the options for this feature.
2. If you already have channel auto-switching enabled but are still getting slow speeds or poor connections on your home network, you can try manually setting the channel and performing speed tests to find the fastest one.
3. If your router is more than a few years old, you may want to consider upgrading to a new one.

## **3. Interference from other electronics**



Interference can also come from other electronics and appliances that aren't connected to your wireless network, but use the same 2.4GHz or 5GHz frequencies to communicate. Cordless phones, Bluetooth devices, and baby monitors are some examples. You might also experience interference around wireless cameras or security systems.



Electronics and appliances, like microwave ovens, generate radio frequency noise as a byproduct, so you may notice a network slowdown or get disconnected only when you're reheating dinner. Some larger electronics, such as TVs, can affect Wi-Fi signals even when they're asleep or turned off since their power supplies may generate short range interference.

### **Troubleshooting tips**

1. You can try turning off or unplugging some of your electronics to temporarily reduce wireless interference.
2. Try moving other electronic devices — sometimes a few feet can make a big difference in wireless signal quality.
3. Some wireless devices can broadcast and receive both 2.4GHz and 5GHz signals. If you suspect a particular wireless device, it may have options to switch frequencies. If your products are using a 2.4GHz connection, try switching to the 5GHz frequency.

[How to use Nest products with 2.4 and 5GHz Wi-Fi networks >](#)

If you've tried the steps listed above and you're still having issues, follow the link below for more steps you can take.

# Recommended Wi-Fi network and router settings for use with Nest products

Affected products: Nest Thermostat E, Nest Protect, Nest Cam Outdoor, Nest Cam IQ indoor, Nest Cam Indoor, 3rd gen Nest Learning Thermostat, 2nd gen Nest Learning Thermostat, 1st gen Nest Learning Thermostat

These settings are recommended for use with Nest products. They can help to improve the performance of your Nest products and help to resolve Wi-Fi connection problems. We've also included some settings for advanced users.

Nest products are designed to easily connect to your home Wi-Fi network. If you haven't had any issues during setup, you probably won't need to make any of the changes listed here. For general troubleshooting steps to common Wi-Fi issues, follow this link:

[Troubleshooting Wi-Fi and connection issues >](#)

If you've tried some of the steps in this article and you're still having issues, follow our recommendations to check your network and router settings. If you're not familiar with Wi-Fi access point/router settings, you can try contacting your internet service provider. Ask your provider to help you view and change these settings.

[Make sure your network and router will work with Nest products](#)

[Using range extenders](#)

[Prepare your Wi-Fi router before making changes](#)

[Change your router's basic settings](#)

[Change your router's advanced settings](#)

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## Make sure your network and router will work with Nest products

In general, Nest products will work almost anywhere there's a Wi-Fi signal. But there are a few things to keep in mind if you're trying to connect to certain types of networks or routers.

- A small number of Wi-Fi routers aren't compatible with Nest products, so check the following article to be sure yours will work:

[Some routers may cause issues with adding a product or Wi-Fi connections >](#)

- Standard Wi-Fi routers use the 2.4GHz band, the 5GHz band, or both. Some Nest products only work with the 2.4GHz band. Learn more in the following article:

[How to use Nest products with 2.4 and 5GHz Wi-Fi networks >](#)

- Mobile hotspots, guest networks, and other types of internet service are not recommended for use with Nest products. Nest products do not support Enterprise networks such as 802.1x/RADIUS or captive portal networks (networks that require you to agree to terms of service, such as a coffee shop or hotel). For more information, see the following article:

[Types of Wi-Fi networks that aren't recommended or won't work with Nest products >](#)

- Open-source firmware such as DD-WRT, OpenWRT and Tomato are not supported by Nest. While some versions may work well with Nest products, compatibility may vary from release to release.
- If you're trying to connect a Nest Protect, make sure your router supports IPv6. Your Nest Protect uses an IPv6 address to communicate and set up connections with other Nest Protects.

**Note:** Even if your router supports IPv6, your internet service provider may not. Contact your provider to make sure that IPv6 is supported in your area. If your provider doesn't support IPv6, you will not be able to add your Nest Protect to your Nest Account. This means your Nest Protect will not send alerts to your phone or tablet, but your Nest Protect will still be able to detect smoke or CO and sound an alarm.

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## Range extender settings

Occasionally, you may need to add a Wi-Fi access point to extend the range of your Wi-Fi network so your Nest products can connect to the internet.

- Set the new access point to work in [bridge mode](#). Aside from that, the basic settings such as password and encryption should be same as your existing router.
- For simplicity, set the access point to broadcast the same network name (SSID). It's not necessary, but doing this can make connecting to your network less confusing.
- If possible, use a range extender from the same manufacturer as your router. Generally speaking, products from the same brand will work better together. If you can't use the

same brand, contact the manufacturer for recommended settings that will work with your router.

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## **Prepare your Wi-Fi router before making changes**

Some of the changes you make might prevent you from connecting to the internet. So it's important to follow these steps in case you need to switch back to your router's old settings.

### 1. Download the manual for your router

Because each router is different, you'll need to refer to your router's manual or contact your internet service provider to learn how to change its settings. You can usually download the manual from the manufacturer's website. There may be several versions of each router, so be sure you're downloading the manual that matches your router's model number.

### 2. Backup your router's current settings

Follow the instructions in the manual to backup your router's current settings. If you need to restore your old settings, having a backup will make it easier to get everything working again. If your router doesn't have a backup feature, you may be able to print out the current settings, or simply write them down.

### 3. Update your router's firmware or software

To ensure the best performance and compatibility, install the latest software updates for your router. You can usually find the latest software by searching for your router model on the manufacturer's website. If installation instructions aren't included with the download, check your router's manual.

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## **Change your router's basic settings**

Now that you've gone through the steps above, you can start changing your router's settings. Remember that each router is unique, so check the manual for specific information on how to change the settings below.

If you use multiple access points on your network, such as a second router or range-extender, make sure that all of them use the settings recommended below. If they don't all use the same settings, they may not be able to connect to each other or your Nest products.

- Set your Wi-Fi channel selection to Auto instead of a specific channel. This lets your router automatically switch channels to avoid interference that can slow down or even block Wi-Fi signals. For more info about troubleshooting Wi-Fi network interference, check out the following article:

[Learn about wireless interference and how to troubleshoot it >](#)

- If your Wi-Fi router is dual band (uses both 2.4GHz and 5GHz signals) your Nest product may be able to get a better signal on [one band or the other](#), depending on your surroundings.

**Note:** If any other products on your network use WEP encryption, they'll be disconnected from your network after you make this change. You'll have to change their settings to WPA2 as well.

- If you have a Nest Thermostat, turn on your router's Power Save Mode (PSM). Routers in Power Save Mode will stay connected to the Nest Thermostat, but will communicate with it only when necessary (for example, when you change the temperature). This helps the thermostat's battery stay charged. If your thermostat is disconnecting from your network because of a low battery, the following link has more troubleshooting suggestions:

[Troubleshooting when the Nest thermostat disconnects or is offline in the Nest app >](#)

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## Change your router's advanced settings

If you're familiar with configuring Wi-Fi networks, firewall settings, or MAC address filtering options, here are some additional things to try. If you're not familiar with these network settings, you can try contacting your internet service provider. Ask your provider to help you view and change these settings.

- Check your router's firewall. Your firewall settings may be preventing Nest devices from connecting to the internet. You can try lowering these settings temporarily to see if your issue is resolved. Make sure to set your firewall settings back to your preferred security level afterward.

**Warning:** Lowering your router's firewall settings may increase the risk of incoming threats from the internet. Refer to your router or firewall manufacturer for additional information.

- Set your Wi-Fi router's DHCP lease time to at least 2 hours. This can help ensure your Nest products stay connected to your network. Any setting lower than 2 hours may prevent your Nest products from reconnecting to your network, even if the connection drops out for half a second or less.

- If you have MAC address filtering enabled for added network security, the MAC addresses of your Nest products must be added to the list of authorized devices. You can use your router's software to view the MAC addresses of all devices on your network; refer to your router's documentation for instructions. Or, see the following article to learn how to find the MAC address for your Nest products:

[How to find your Nest product's MAC address and add it to your router's whitelist >](#)

- If you have an 802.11 ac router or range extender, make sure it's set up to allow 802.11 b/g/n device connections. 802.11 ac isn't supported by Nest products.

## Wi-Fi routers that are incompatible with Nest products

Affected products: Nest Thermostat E, Nest Protect, Nest Cam Outdoor, Nest Cam IQ indoor, Nest Cam Indoor, 3rd gen Nest Learning Thermostat, 2nd gen Nest Learning Thermostat, 1st gen Nest Learning Thermostat

Nest products need to be connected to the internet to use all their features, but a small number of Wi-Fi routers aren't Nest compatible. Symptoms include low batteries or power issues, not being able to connect to Wi-Fi during setup, or Offline status in the app because of a Wi-Fi disconnection.

The lists below have routers that we have confirmed can cause issues with Nest products. However, the list is not definitive, so there may be unlisted routers that also aren't compatible.

Some network equipment may cause issues with only one type of Nest product, such as the Nest Thermostat, so some of your Nest products will work fine while others may not.

### If your router is listed below:

1. Make sure your router's firmware is up to date: check the manufacturer's website, contact their support, or contact your ISP if they provided your router.
2. Check that your Wi-Fi equipment settings comply with [Nest's recommended router settings](#).
3. If your router settings match the recommended settings but you are still having issues, contact your internet service provider and exchange your router or modem for a compatible one. If your router wasn't provided by your ISP, you may need to upgrade it yourself.

## If your router isn't listed below:

1. Make sure your router's firmware is up to date: check the manufacturer's website, or contact their support.
2. Check that your Wi-Fi equipment settings comply with [Nest's recommended router settings](#).
3. Try [troubleshooting Wi-Fi and connection issues](#).

**Important:** Nest products are not compatible with WEP-ASCII. If your router supports this type of security and you do not have any other security enabled, your Nest products will not be able to connect.

[Nest's recommended router settings >](#)

## Incompatible routers

[Routers that can cause issues with Nest Thermostats>](#)

Even if your router is not on this list, you may be using a router that is incompatible with Nest Products. The list of symptoms below can help you to identify routers that may be incompatible or are using incompatible settings.

Using the Nest Learning Thermostat with incompatible Wi-Fi routers/access points may result in:

- Nest thermostat being offline in the Nest app
- Nest thermostat disconnecting frequently
- Excessive battery drain
- Frequent restarts
- Being unable to add your Nest thermostat to your Nest Account
- Higher than normal temperatures detected by the Nest thermostat

### [2Wire routers](#)

3800HGV-B

### [Actiontec routers](#)

M1424WR Rev. E

### [Belkin routers](#)

F9K1001

F9K1002

F5D8230-4

F5D8233-4

### [BT routers](#)

Business Hub 3

Home Hub 3

### [Cisco/Linksys routers](#)

WRT110

E1200

WRT160N

WRT320N

WRT54G

WRT54G2

WRT54GL

WRK54G

### [D-Link routers](#)

DAP2553

DI-524

### [Netgear routers](#)

DGN1000

WNDR3300

WNDR3400

WNDR3700

WNDR3800

WNDR4000

WNR2000

WNR3500L

WNDAP360

WPN824v3

### [uBee routers](#)

DDW365

### [Routers that can cause issues with the Nest Protect>](#)

Even if your router is not on this list, you may be using a router that is incompatible with Nest Products. The list of symptoms below can help you to identify routers that may be incompatible or are using incompatible settings.

Some routers support IPv6 for external internet connections but do not support IPv6 communications over the local network, which Nest Protect requires.

Using the Nest Protect with incompatible Wi-Fi routers/access points may result in:

- Difficulty adding a Nest Protect to your Nest Account
- Nest Protect offline in the Nest app

### [Asus routers](#)

RT-N10  
RT-N66U  
WL-330N

#### Cisco routers

WRT100  
WRT110  
WRT160N V3  
WRVS4400N V2

#### D-Link routers

DAP-1360  
DIR-605L  
DIR-625-2  
DIR-636L  
DIR-651

#### Encore routers

ENHWI-AN3

#### Engenius routers

ESR7750

#### Hawking routers

HWRN2

#### Netgear routers

JNR3210  
WNR834B  
VMDG490

#### Planex routers

CQW-MR500

#### Sapido routers

GR-1733

#### Westell routers

7500

#### Zuni Digital routers

ZGR304F  
ZR301F

#### ZyXEL routers

WAP3205  
NBG4615

[Routers that can cause issues with Nest cameras>](#)

Even if your router is not on this list, you may be using a router that is incompatible with Nest Products. The list of symptoms below can help you to identify routers that may be incompatible or are using incompatible settings.

Using a Nest camera with incompatible Wi-Fi routers/access points may result in:

- Difficulty adding a Nest camera to your Nest Account
- Nest camera offline in the Nest app
- Being unable to view video history
- Nest camera overheating

#### BT routers

Home Hub 3

#### Netgear routers

Orbi WiFi System (RBK50) AC3000

Orbi WiFi System (RBK40) AC2200

Orbi WiFi System (RBK30) AC2200

## How to set up your camera with the Nest app

Affected products: Nest Cam Outdoor, Nest Cam IQ indoor, Nest Cam Indoor, Dropcam Pro, Dropcam

Start here if you have a new Nest Cam or if you're moving a camera to a different Nest Account or home. Setup is simple - the Nest app will take you through the steps, but there are some extra details and tips that can help.

Here's how to add your camera to your Nest Account, connect it to your Wi-Fi network, and test its live video stream. Once your camera's up and running, we'll give you some different options for mounting your camera. If you're looking for help on physically installing or mounting your camera, there are links at the end of the setup instructions.

**Important:** Follow these steps to add your camera to the Nest app **before** you install or mount your camera. **Always** test video streaming in your chosen location before installation or mounting.

# How to use 2-step verification to add stronger security to your Nest Account

Affected products: Nest app, Nest Accounts

With optional 2-step verification, you'll go through an extra layer of security to sign into your Nest Account. This article shows you how to set up this feature and change it when you need to.

2-step verification helps prevent someone from signing into your Nest Account without your permission. You don't have to use 2-step verification if you don't want to, but we think it's worth the effort.

## How it works

With 2-step verification, your phone helps prove your identity any time you sign into your Nest Account or make other changes to security settings.

### The two steps of verification

As the name implies, 2-step verification relies on two different tools at your disposal.

- **First, something you know:** Whenever you sign into your Nest Account, you'll be asked for your email address and password just like before.
- **Second, something you have:** After you enter your password, Nest sends a unique, temporary verification code to your phone in order to make sure it's really you. Enter the code when prompted, and you're in.

[When Nest uses 2-step verification>](#)

## Set up 2-step verification

To use 2-step verification, you'll need:

- The [latest version of the Nest app](#) on all the devices that have the app.

- The email address and password you use to sign into your Nest Account. If you've forgotten, you can [reset your password](#) with the Nest app.
- A phone that can accept text (SMS) messages, and a reliable signal from your carrier.

**Important:** Make sure this phone will be available in the future. Nest sends a unique passcode to the same phone every time you sign into your account. So don't use a temporary phone, or someone else's phone, or a work phone that might become unavailable. If you don't have a phone number that meets these criteria, we recommend not using 2-step verification.

- A separate invitation and account for each person accessing your Nest home.

**Important:** If you're sharing a single Nest Account email address and password with other users, we recommend you stop sharing this information. Instead, you can [invite each person to access your home with Family Accounts](#) so each person has their own account. Otherwise, someone might try to sign in but wouldn't be able to get the verification code sent to your phone.

**Dropcam app customers:** 2-step verification is not compatible with the Dropcam app. If you're only using the Dropcam app, you won't be able to add 2-step verification to your account. But if you're using both the Dropcam and Nest apps, and you add 2-step verification with the Nest app, you won't be able to sign into the Dropcam app after that. You'll need to use the Nest app for everything going forward.

[Add 2-step verification to an existing Nest Account>](#)

## Change your 2-step verification settings

[Change your phone number>](#)

To change your phone number, you'll first need to remove your old phone number, which turns off 2-step verification. Then you can set it up again with your new number.

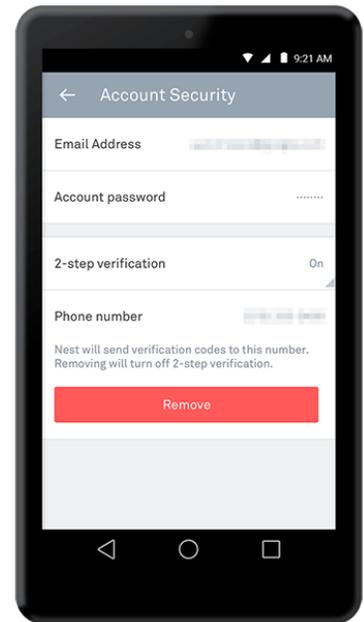
**Important:** You'll still need to have your old phone number handy in order to change this security setting. Nest sends the code to your old phone one last time so you can authorize the activity.

1. On the Nest app's home screen, select the **Menu**



icon

at the top.



2. Select **Account**.
3. Select **Manage account**, then **Account security**.
4. Select **Phone number**, then select **Remove**.
5. Follow the prompts to enter your password and the temporary verification code sent to your **old** phone number.

6. This will turn off 2-step verification. Now you can follow the steps above to set up 2-step verification again, using your new phone number.

### [Remove 2-step verification from your Nest Account>](#)

If you don't want to use 2-step verification any more, you can go back to using only a password to sign into your Nest Account.

**Important:** You won't be able to turn off 2-step verification without your phone. Nest sends a verification code one final time to help ensure you're the one requesting this security change.

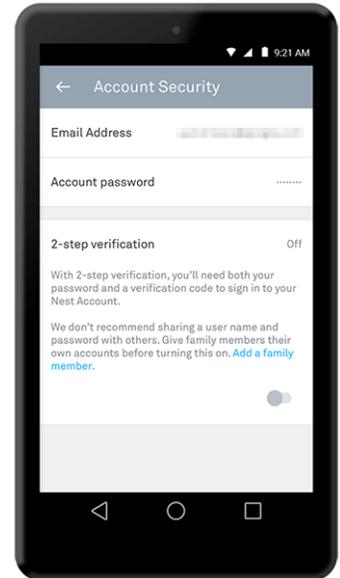
1. On the Nest app's home screen, select the **Menu**



icon

at the top.

2. Select **Account**.
3. Select **Manage account**, then **Account security**.
4. Select **2-step verification**. Then tap the switch to toggle 2-step verification **Off**.



5. Follow the prompts to enter your password and the temporary verification code sent to your existing phone. You'll then be asked to confirm that you want to turn off 2-step notification.

In the future, you can add 2-step verification back to your account, using any phone number that fits the criteria above.

## The alternative way to set up your camera on a computer

Affected products: Nest Cam Outdoor, Nest Cam Indoor, Dropcam Pro, Dropcam

The Nest app on your phone will guide you through a quick camera setup and connect it to Wi-Fi. But if you're having difficulty, certain Nest camera models can be set up on a computer instead of a phone. Here's how.

You can use a Mac or Windows computer to set up the following Nest cameras:

- Nest Cam Indoor
- Nest Cam Outdoor
- Dropcam Pro, Dropcam HD

For these cameras, follow the steps below to get your camera up and running. After that, we'll give you some different options for installing your camera on a surface like a shelf or a wall.

**Important:** Camera models not listed above **cannot** be set up on a computer. Instead, they must be [set up with the Nest app on a phone or tablet](#). If you're having trouble setting up your camera with your phone or tablet, be sure your phone's Bluetooth is turned on, and bring your camera and phone/tablet closer to your Wi-Fi router. Doing those two things can solve many of the [errors you might see during setup](#).

## Before you start

1. If you haven't already, you should first try to [set up your camera with a phone or tablet](#).
2. For setup on a **Windows** computer, you'll need to be signed in as an Administrator. To learn about Administrator rights, visit [Microsoft's support site](#).
3. Bring your camera and your computer to the spot in your home where you'll be setting up your camera:

**Nest Cam Indoor, Dropcam Pro, Dropcam HD:** Place your camera on a table or on another convenient surface near where you want to mount it.

**Nest Cam Outdoor:** Start inside your home, near your Wi-Fi router and an indoor power outlet. Later, you'll be going outside to test your Wi-Fi connection and mount your camera.

Now you're ready to set up your camera.

## How to set up your camera

### Connect your Nest Cam to your computer



If you haven't already, be sure to plug the included USB cable into the back of your camera.

**Note:** If you have a Nest Cam Outdoor, the USB cable is permanently attached, so you don't need to do anything.



**Plug the other end of the cable** into a USB port on your computer. The light on the front of your Nest Cam will glow blue (yellow on Dropcam), telling you that the camera is booting up. After a moment, the light will begin blinking.



Nest Cam



Dropcam

Once your camera finishes starting up, a window should pop up on your computer with setup icons for both Mac OS and Windows. Double click on the icon for the OS your computer uses.

**Important:** Don't unplug your camera from your computer until prompted.

[Can't find the setup icons on your computer?>](#)

## Follow the prompts on your computer to finish setup

After you double-click the setup icon on your computer, an app will launch and run on your computer. The app will guide you through the following steps:

1. Create a [Nest Account](#), or sign in if you already have one.
2. Connect your camera to Wi-Fi. Your camera will scan for nearby networks automatically. Wait a moment for the list of Wi-Fi networks to appear, then choose the network you'd like your camera to use. You may also be asked to enter the network's password.

**Important:** Be sure to connect only to a wireless network that you trust.

3. Pick a name for your camera that matches its location. Choose a pre-set location or create a custom location by selecting Custom at the bottom. The Nest app will use the location to tell you where alerts are happening and group any other Nest products by location.

It can take a little while to find and connect to your Wi-Fi network. If you don't see your network or your camera fails to connect, see the following article for some troubleshooting help:

[My Wi-Fi network doesn't show up when I try to set up my Nest Cam >](#)

4. Finish setup: the Nest app will guide you through some final customization steps, including checking that your camera can stream video on your Wi-Fi network.

If you can't see your camera's video stream when you sign into [home.nest.com](#), follow the troubleshooting suggestions in this article:

[What to do if you can't watch Nest Cam video on a Mac or Windows computer >](#)

## Bookmark home.nest.com and sign into the Nest app on your phone

Add a bookmark for [home.nest.com](#) to your browser so you can quickly get to your Nest Cam video stream and manage your camera's settings. If you have any other Nest products, you can also manage them here.

At this point, you can also sign into the Nest app **on your phone** to watch video, get alerts about important activity, and change camera settings.

**Note:** Even if you weren't able to use your phone to set up your camera initially, once your camera's up and running, you should be able to use your phone for day-to-day video viewing and camera management.

[Learn more about what you can do with the Nest app >](#)

## Mount your camera

Now you're ready to install your camera in the spot where you want it to stream video.

Unplug the USB cable from your computer if you haven't already. Then plug it into your camera's power adapter.

Both Nest Cam Indoor and Nest Cam Outdoor are designed for DIY installation, but each is mounted differently.

- **Nest Cam Indoor or Dropcam:** Plug your camera into a household outlet near where you want to install your camera. Then proceed to the following article.

# How to mount your Nest Cam Indoor

Affected products: Nest Cam Indoor

You can place Nest Cam Indoor on a horizontal surface using the stand on its own, or you can mount the camera on another surface using the magnet or the mounting plate. Here are some tips for each option.

After you've [set up your Nest Cam](#) with the Nest app, you're ready to start thinking about how you want to mount it.

**Important:** Nest Cam Indoor is installed very differently than [Nest Cam Outdoor](#).

## Three ways to mount your camera

Everyone has different needs, and each home has a different layout, so we designed Nest Cam Indoor to be easily installed just about anywhere and to face any direction.

There are three different ways you can install your Nest Cam Indoor (each is detailed in the sections below):

- Simply place it on a horizontal surface like a shelf
- Use the magnetic base to attach it to a metal surface
- Install the metal plate to mount your camera on a wall, ceiling or any non-magnetic surface

## The camera stand gives you the perfect angle

No matter which method you choose, Nest Cam's versatile stand helps you point it exactly where you want.

The stand pivots backward and forward with a 180° range of motion. So, for example, you can mount Nest Cam Indoor up high and pivot the stand downward to be able to see the room.

The camera itself can rotate a full 360° in the stand, and if you have a Nest Cam (not a Dropcam), the stand can also rotate 360° around. That way, if you need to mount your camera at an angle, you can twist the camera and the stand to straighten the image.

You can even install the camera on a ceiling, upside down, and have the image rotate 180° in the camera settings to make sure it looks great when viewing the video in the app.



## Before you begin

1. Make sure you've [set up your Nest Cam Indoor](#) with the Nest app before you mount it. Or, if you need to, set it up with a [Mac or Windows computer](#) instead.
2. Need help deciding on a location for your camera? Here are some tips to help you pick a good spot.

[Where to put Nest Cam so it keeps an eye on what you want >](#)

[How to protect your Nest Cam and its video from theft >](#)

3. Remove the stickers on your Nest Cam's lens and on the bottom of the stand. They're only there for protection during shipping and installation.

4. Review the [Safety Guidelines](#) for mounting your camera. Follow these guidelines to avoid risk of heating and burns, risk of fire and shock, and risk of other serious injury.

**Important:** Nest Cam Indoor is installed very differently than [Nest Cam Outdoor](#).

## Mount your camera

When you're ready, choose how you want to mount your camera.

[How to place your camera on a flat horizontal surface](#)

[How to attach your camera to a metal surface](#)

[How to install your camera on a wall or ceiling with the mounting plate](#)

### How to place your camera on a flat horizontal surface



You can put Nest Cam Indoor on a shelf, countertop or table. You don't need the included metal mounting plate for this option. Just set it down and check its video stream with the Nest app.

If your camera can't connect to Wi-Fi, or if the video stream is interrupted, you might need to pick another location where the signal is stronger. Even a few inches can make a difference.

See more Wi-Fi troubleshooting suggestions in the following article.

## [Troubleshooting when Nest Cam disconnects or is offline in the Nest app >](#)

To learn more about your camera and customize its settings, see our suggestions for [next steps](#).

### **How to attach your camera to a metal surface**

There's a powerful rare earth magnet at the bottom of Nest Cam Indoor's stand, so it will securely attach itself to metal surfaces. You don't need to drill holes or use the metal mounting plate to do this.

Simply attach Nest Cam Indoor to a refrigerator, a file cabinet, or other metal surface. We do not recommend attaching the camera to a computer or electronics as this could potentially lead to damage.

Then check your camera's video stream with the Nest app. If your camera can't connect to Wi-Fi, or if the video stream is interrupted, you might need to pick another location where the signal is stronger. Even a few inches can make a difference.

See more Wi-Fi troubleshooting suggestions in the following article.

## [Troubleshooting when Nest Cam disconnects or is offline in the Nest app >](#)

If you'd like to explore some of your camera's features, see our suggestions for [next steps](#).

### **How to install your camera on a wall or ceiling with the mounting plate**

If you don't have a metal surface that the magnetic base can adhere to, you can install the camera's metal mounting plate on a wall or even the ceiling. Then, you can stick your Nest Cam to the plate and rotate it to get the image you want.

3. Once your camera is successfully streaming video, it's time to install the mounting plate. Hold the plate against the wall, ceiling, or other surface, and screw it in. Make sure the cable clip points in the direction you want the cord to go. The screws are self-tapping, so they'll install easily in drywall, wood, and plaster without drilling a hole. If you need to drill into hard materials like concrete or masonry, use wall anchors which are available at your local hardware store.

**Important:** If you need to drill holes, drill only one to start with. Place the mounting plate on the wall so that the hole you drilled lines up with one of the slots on the plate. Drill the other two holes using the slots as a guide. This will help all the holes line up with the slots.

4. If you used a drill to put in the screws, hand tighten them with a screwdriver. This will ensure a secure installation and help prevent over-tightening and possible damage to your walls or ceiling.



5. Stick your Nest Cam to the mounting plate. The rare earth magnet will hold your Nest Cam securely, even if you install it on the ceiling.

**Important:** The rare earth magnet is very strong. Make sure to watch your fingers when attaching the mounting plate to avoid injury.

6. Check your camera's view by looking at its live stream in the Nest app, and adjust the position if you need to. You can also [flip the view](#) in the Nest app if it's completely upside down.

Ready to explore some other things your camera can do? See our suggestions for [next steps](#).

If you ever want to move your Nest Cam to a new location, be sure to also [change its location](#) with the Nest app.

## Next steps

Now that your camera is mounted, here are some settings to explore, and some things you might not already know about your camera.

- **Notifications:** Your camera can alert you when it detects motion, sound or both. Select what [kind of notifications](#) you'd like to get from your camera.
- **Home/Away Assist:** You can have your camera turn on when you leave your home, and turn off when you get back. When you [enable Home/Away Assist](#) for your camera, it'll automatically switch its behavior as you come and go.
- **Bandwidth and image quality:** By default, the Nest app will automatically set your camera's image quality for you. You can [change your camera's image quality](#) at any time with the Nest app. Experiment with different quality settings to find the one that works best with your internet connection.
- **Nest Aware:** If you're not already a subscriber, learn about [what you get with a Nest Aware subscription](#) — including more intelligent alerts and a 10-day or 30-day video history stored in the cloud.