BILL'S HOME TECH
Home & Small Business Tech Solutions

BILL'S COMPLETE MANUALS

Smart Air Conditioners, Fans & Heaters

Window and portable ACs, mini-split controllers, ceiling fans and space heaters — explained in plain English, one step at a time

A plain-English guide for seniors and their families

Take your time — you can't break it

Written for you by Bill — Bill's Home Tech

(330) 200-8042 · BillsHomeTech.com

For smart room ACs, mini-split controllers, fans & heaters · facts current November 2026

What's Inside

This is your guide to smart air conditioners, fans and heaters. Read it in any order and at your own pace. Whether you just bought a Wi-Fi window unit, want to run a mini-split from your phone, or are wondering whether it's safe to put a space heater on a timer, every chapter explains what a feature actually does *for you* and gives slow, step-by-step directions. Brands and apps change their screens now and then; if yours looks a little different, the idea is still the same. And the space heater chapters come first in importance, even though they're in the middle: please read Chapter 15.

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PART 1

Getting Started

What "smart" really adds to an air conditioner, fan or heater, and the short checklist to run through before you set one up. Start here.

CHAPTER 1

A Note from Bill

Hello, and welcome. Maybe a new air conditioner came home this summer with a little Wi-Fi symbol on the box. Maybe your family wants to be able to check that Mom's house isn't too hot during a heat wave. Or maybe you've wondered whether you can turn the space heater on from bed before your feet hit a cold floor. Whichever one brought you here, this guide is for **you**.

I'm Bill. I've spent more than 30 years working professionally with technology, and these days I help folks around Portage County, Ohio feel at home with theirs. I wrote this guide the way I'd explain it standing next to you in your living room: patiently, in plain English, with no salesman's talk. If I use a word you don't know, I'll stop and explain it right then.

You truly can't break it by exploring the app

A smart air conditioner is still an air conditioner. It still has buttons on the front and a remote in the drawer, and those keep working whether the phone app is happy or not. Tapping around in the app won't damage anything. The worst that usually happens is the room gets a little warmer or cooler than you meant, and you change it back.

STAY SAFE

The one place I'm strict: space heaters

Cooling gadgets are forgiving. Space heaters are not. Heaters are involved in a large share of serious home heating fires, and the rules for using them safely are simple but firm. Before you put any heater on a schedule, an app or a smart plug, please read Chapter 15 and Chapter 16.

WHAT THIS DOES FOR YOU

Why this matters

Done right, a smart cooling or heating setup means a comfortable room when you walk in, lower bills because nothing runs in an empty house, and peace of mind for a family who can check the temperature at a parent's home from their own phone.

What this guide covers

- What "smart" adds: app control, schedules, voice, "away" features and energy reports.
- Choosing the right size air conditioner, and the difference between window, portable and mini-split units.
- The brand apps from Midea, GE Appliances, LG and Frigidaire, and getting them on Wi-Fi.
- Add-on controllers that make an ordinary AC or mini-split work from your phone.
- Smart ceiling fans, tower fans and the right fan direction for each season.
- Space heater safety, and why smart plugs and big appliances often don't mix.
- Heat waves, cold snaps and checking on a parent's home from afar.
- What to do when it won't connect, goes offline or acts up after a power outage.

And I'm only a phone call away

This guide will carry you a long way on your own. But if you get stuck — the app won't find the air conditioner, or you'd like someone to look over where the heater sits — call me at **(330) 200-8042**. No question is too small.

So let's get comfortable, in every sense of the word.

— Bill

CHAPTER 2

What "Smart" Adds to Cooling & Heating

A "smart" air conditioner, fan or heater is the regular appliance plus a small Wi-Fi radio. That radio lets it talk to an app on your phone through your home internet. Everything else about it — how it cools, how loud it is, how much power it uses — is the same as a regular model. So the question is never "is smart better?" It's "which of these extras would I actually use?"

The five things smart adds

What it adds	What that means for you
Control from your phone	Turn it on or off, change the temperature, fan speed or mode from your chair, your bed, or the grocery store parking lot.
Schedules	Have it start cooling the bedroom half an hour before bedtime and shut off in the morning, every day, without you remembering.
Voice control	Say "Alexa, set the bedroom AC to 74" or "Hey Google, turn off the fan." Handy if getting up is hard or the remote has gone missing again.
"Away" features	Some apps can notice when your phone leaves home and turn things off, then turn them back on as you head home. The fancy name is **geofencing** (Chapter 18).
Usage and reminders	Some apps show how long the unit has run or remind you to clean the filter.

WHAT THIS DOES FOR YOU

What this does for you

The biggest everyday win is usually the simplest: never coming home to a hot, stuffy house, and never wondering "did I leave the air on?" Open the app, look, and you know.

What smart does *not* change

- It doesn't make a too-small air conditioner cool a big room. Size still matters most (Chapter 4).
- It doesn't make a space heater safer. The safety rules in Chapter 15 apply to every heater, smart or not.
- It doesn't save money by itself. Savings come from running things *less*: schedules, "away" settings and turning things off in empty rooms.
- It doesn't work without home Wi-Fi. If the internet is down, use the buttons or remote, as always.

Three ways to get "smart"

1. **Buy an appliance with Wi-Fi built in.** Many window and portable air conditioners from Midea, GE Appliances, LG and Frigidaire have it. You use the maker's own app (Chapter 6).
2. **Add a smart controller to what you already own.** Small devices from companies such as Sensibo and Mysa copy your AC remote's signals so your phone can do what the remote does (Chapter 9). This is the usual route for mini-splits.
3. **Use a smart plug — carefully, and only with the right appliance.** A smart plug can switch simple things, like a basic fan, on and off. It is the wrong tool for most space heaters and many air conditioners (Chapter 17).

GOOD TO KNOW

"App" just means a program on your phone

When this guide says "the app," it means the free program you download from the App Store on an iPhone or the Google Play Store on an Android phone. The air conditioner makers' apps are free; you don't need a subscription to use the basic features.

TIP

Related guides

If your home has central air with a wall thermostat, our Smart Thermostats guide covers that side. For lamps and simple plug-in gadgets, see our Smart Plugs & Switches guide.

CHAPTER 3

Before You Start: Wi-Fi, Phone & Plug Checklist

Most smart-appliance headaches come from the same handful of things, and nearly all of them can be sorted out before you open the box. Run through this list once and setup goes much more smoothly.

1. Your Wi-Fi needs a 2.4 GHz network

Home Wi-Fi routers usually broadcast on two "bands": **2.4 GHz**, which reaches farther, and **5 GHz**, which is faster over short distances. The Wi-Fi chips in air conditioners and other appliances generally only speak 2.4 GHz. Midea, LG and Frigidaire all say so plainly in their support pages: the appliance will only join a 2.4 GHz network.

Most modern routers use one name for both bands and sort devices out on their own. That usually works, but sometimes the phone ends up on 5 GHz during setup and the appliance can't follow it. Frigidaire notes that some dual-band or "mesh" systems may need to be switched to 2.4 GHz manually for setup. Chapter 24 explains what to do if you hit this.

2. Know your Wi-Fi name and password

You'll type the Wi-Fi password into the app during setup, and it has to be exact, capital letters and all. Frigidaire suggests avoiding quote marks, slashes, backslashes and the & sign in the network name and password, and says a network with no password at all needs one added. If yours is written on a sticker on the router, that's usually it, unless someone changed it.

3. A phone with the app and an account

- A reasonably recent iPhone or Android phone, connected to your home Wi-Fi.
- The maker's app, downloaded from the App Store or Google Play (Chapter 6 lists them).
- An email address and a password for the app account. Write them on the Cheat-Sheet in Chapter 28.
- On an iPhone, be ready to tap **Allow** when the app asks to find devices on your local network. LG points out that its app needs this permission to add products.

4. The right outlet

Air conditioners and heaters are among the biggest power users in a home. Before you choose a spot:

- Plug air conditioners and heaters **directly into a wall outlet**, not an extension cord or power strip.
- Check the plug. Some of the largest window air conditioners need a special 230-volt outlet; the box and the plug shape will tell you. If it doesn't fit, call an electrician — never force or adapt it.
- Space heaters have the strictest rules of all; Chapter 15 spells them out.

HEADS UP

Wi-Fi reaches, or it doesn't

A window unit at the far end of the house, or a heater in a basement, may be out of Wi-Fi range. Before you buy, take your phone to that spot and see whether it shows good Wi-Fi bars. If not, a Wi-Fi extender or mesh system may be needed first.

Your setup-day checklist

Item	Ready?
Wi-Fi name	Written down, exactly as spelled
Wi-Fi password	Written down, capitals and all
Phone	Charged, on home Wi-Fi, Bluetooth on (some apps use it during setup)
The app	Downloaded and an account created before you start
The appliance	Installed, plugged straight into the wall and turned on
Patience	Twenty minutes, a cup of coffee, and no one waiting on you

FROM BILL

A little prep saves a lot of grief

The Wi-Fi password and the 2.4 GHz question are the first things the makers' own troubleshooting pages bring up. Five minutes with this checklist can turn a frustrating afternoon into a quick win.

PART 2

Smart Window & Portable Air Conditioners

Picking the right size and type, the four big brand apps, getting a unit on Wi-Fi, and what to do with a window unit when an Ohio winter arrives.

CHAPTER 4

Choosing the Right Size Air Conditioner

Before any talk of apps and Wi-Fi, the single most important choice is size. An air conditioner's cooling power is measured in **BTUs** (British Thermal Units — just a measure of how much heat it can pull out of a room in an hour). Too small and it runs all day without catching up. Too big and, surprisingly, it does a worse job too.

The ENERGY STAR sizing chart

ENERGY STAR, the government's efficiency program, publishes a simple chart. Measure the room's length and width in feet, multiply them to get square feet, and find the matching row.

Room size (square feet)	Cooling capacity needed (BTUs per hour)
100 up to 150	5,000
150 up to 250	6,000
250 up to 300	7,000
300 up to 350	8,000
350 up to 400	9,000
400 up to 450	10,000
450 up to 550	12,000
550 up to 700	14,000
700 up to 1,000	18,000

Then adjust for your room

- **Very shady room:** reduce the capacity by about 10 percent.
- **Very sunny room:** increase it by about 10 percent.
- **More than two people** regularly in the room: add 600 BTUs for each extra person.
- **A kitchen:** add 4,000 BTUs, because cooking makes a lot of heat.
- The chart assumes ordinary 8-foot ceilings. Higher ceilings mean more air to cool.

A worked example

A bedroom 12 feet by 15 feet is 180 square feet. The chart says 6,000 BTUs. If it faces west and bakes in the afternoon sun, add 10 percent: about 6,600 BTUs. A 6,000 or 8,000 BTU unit would be the sensible shopping range, and the 8,000 only if the sun really pours in.

HEADS UP

Bigger is not better

ENERGY STAR warns that an oversized air conditioner costs more to buy, wastes energy and doesn't cool better. A unit that's too big cools the air quickly and shuts off before it has pulled the moisture out, which can leave the room cool but clammy.

Look for the ENERGY STAR label

Room air conditioners that earn the ENERGY STAR label use less electricity than standard models for the same cooling. ENERGY STAR also runs a free online **Product Finder** at energystar.gov, where you can look up certified models, and it highlights a smaller group of top performers as **Most Efficient**.

WHAT THIS DOES FOR YOU

What this does for you

The right size is quieter, cheaper to run and more comfortable. It's worth ten minutes with a tape measure before you shop, smart features or not.

CHAPTER 5

Window, Portable or Mini-Split: Which Is Which

Three kinds of room cooling show up in most homes. They work very differently, and knowing which one you have tells you which chapters of this guide matter to you.

Type	What it looks like	How "smart" usually works
Window AC	A box that sits in a window, half inside and half outside. Some newer ones are U-shaped and straddle the window sash so you can still close the window.	Built-in Wi-Fi and the maker's app, or an add-on controller
Portable AC	A unit on wheels that sits on the floor, with a wide hose that carries hot air out through a window kit.	Built-in Wi-Fi and the maker's app, or an add-on controller
Mini-split (ductless)	A long, slim unit high on a wall, connected by pipes to a box outside. Many also heat (a "heat pump").	The maker's Wi-Fi adapter, or an add-on controller (Chapter 9)

Window units

Window units are usually the least expensive way to cool one room, and they're simple: everything is in one box, and the hot air goes straight outdoors. The trade-offs are that they block part of the window, they need to be installed securely (they're heavy), and in Ohio most people take them out for the winter (Chapter 8).

Portable units

A portable unit is the choice when a window unit won't fit — a sliding window, a rental, a window that opens onto a porch. The catch is the hose. All the heat the unit removes has to go out through that hose, so it must be connected to the window kit every time it runs. A portable unit with its hose lying loose on the floor just moves heat around the room.

> **TIP**
>
> **Keep the hose short and straight**
>
> The longer and more bent the exhaust hose, the harder the unit works. Place a portable AC close to the window and keep the hose as short and straight as it will go.

Mini-splits

A mini-split is a permanent, professionally installed system. The indoor "head" on the wall blows the air; the outdoor unit does the heavy lifting. They're quiet and efficient, and many can heat as well as cool. Most come with a handheld remote, and the smart options are either the manufacturer's own Wi-Fi add-on or a universal controller that copies the remote (Part 3).

GOOD TO KNOW

Which do I have?

Look for a label on the side of the unit or inside the front panel. It shows the brand, the model number and the BTUs. Snap a photo of it with your phone; you'll want it for setup, for support calls and for the Cheat-Sheet in Chapter 28.

CHAPTER 6

The Brand Apps: Midea, GE, LG & Frigidaire

If your air conditioner has Wi-Fi built in, you'll use the app from the company that made it. The names have changed over the years, which confuses people, so here's where things stand as of November 2026. All of these apps are free.

Brand	App to download	Good to know
Midea	**SmartHome** (listed as SmartHome (MSmartHome))	Replaces the older Midea Air and MSmartHome apps. Older manuals may still say "Midea Air."
GE Appliances	**SmartHQ**	GE's app for its Wi-Fi window air conditioners and other connected appliances.
LG	**LG ThinQ**	Only Wi-Fi models that LG marks as ThinQ-compatible can connect; check the box or manual.
Frigidaire	**Frigidaire 2.0**	Used for Frigidaire's connected room air conditioners.

HEADS UP

Old instructions, new app

If the paper manual tells you to download an app that you can't find, it has probably been renamed or replaced. The Midea Air app is the common example: Midea's current app listing says it replaces Midea Air and the older MSmartHome app. When in doubt, scan the QR code on the unit or in the manual; it points to the right app.

Midea

Midea makes many window units, including the U-shaped models, and portable ACs. In the app you add the unit, pick your 2.4 GHz Wi-Fi, type your password and start the connection. Midea's own instructions say Android phones can scan the QR code on the unit, while iPhones use the **Manual Setup** route.

GE Appliances (SmartHQ)

In SmartHQ, you sign in, press the **+** sign on the Home screen to reach **Add An Appliance**, find the **Air Conditioner** icon and choose **Window Air Conditioner**, then follow the screens. GE's units have a **WiFi Connect** light that helps show what's happening (Chapter 25).

LG (ThinQ)

In LG ThinQ, tap the **+** button and choose **Add Product**. If your air conditioner shows up under **Nearby Products**, you can pick it there. Many LG units are put into pairing mode by holding a button on the remote for about three seconds; LG prints the exact button on the back of the remote, and it varies by model.

Frigidaire (Frigidaire 2.0)

Frigidaire's connected room air conditioners use the Frigidaire 2.0 app. If setup stalls, Frigidaire suggests keeping the unit within good range of the router, holding the appliance's Wi-Fi button for about 10 seconds until it beeps, and trying again.

WHAT THIS DOES FOR YOU

What this does for you

Once the unit is in the app, you can change the temperature, fan speed and mode from anywhere, set schedules, and link it to Alexa or Google so your voice can do the same (Chapter 19).

TIP

One account for the household

Set the app up under one email address that the family shares or that you'll always remember. That account "owns" the air conditioner. If a grandchild sets it up on their own account and then goes home, you're left without control.

CHAPTER 7

Connecting a Smart AC to Wi-Fi, Step by Step

Every brand's screens look a little different, but the steps follow the same pattern. Read them through once before you start, then go slowly. If something fails, it's almost always the Wi-Fi band or the password, and Chapter 24 walks through the fixes.

The general steps

1. Install the air conditioner, plug it **straight into the wall**, and turn it on with its own buttons or remote. Make sure it cools normally before you bother with the app.
2. Stand near the unit with your phone. Make sure the phone is on your home Wi-Fi and Bluetooth is on.
3. Open the brand's app (Chapter 6) and sign in or create an account.
4. Tap the **+** or **Add** button and choose the kind of appliance: air conditioner, then window or portable.
5. Put the unit into **pairing mode** the way the app describes. It may mean pressing a Wi-Fi button on the unit, holding a button on the remote for a few seconds, or simply waiting for a Wi-Fi light to blink.
6. When asked, choose your home Wi-Fi network — the **2.4 GHz** one if they have different names — and type the password exactly.
7. Wait. The connection can take a minute or two. Don't close the app or lock the phone while it works.
8. Give the unit a room name, such as **Bedroom AC**. You'll be glad later, especially with voice control.

Some units briefly make their own Wi-Fi network

Some air conditioners connect by creating a temporary Wi-Fi network of their own for a minute. Your phone joins it, hands over your real Wi-Fi details, and then goes back to your home network. LG's instructions describe this: some LG units show up as a network named something like **LG_AC_** followed by four characters, and LG explains what to type as its password; newer LG models may use an open network that needs no password. The app tells you when to do this.

HEADS UP

Leave your phone on that temporary network until the app says so

When the app asks you to join the air conditioner's own network, your phone may warn "no internet." That's expected. Tap to stay connected, go back to the app, and let it finish.

Once it's connected

- Try it: change the temperature in the app and listen for the unit's beep.
- Look through the settings for **schedules** or **timers** (Chapter 18).
- If the app offers updates for the unit, let it install them.
- Write the account email and app name on your Cheat-Sheet (Chapter 28).

WHAT THIS DOES FOR YOU

What this does for you

From now on, the unit answers to your phone from anywhere you have a signal — the porch, the doctor's waiting room, or a relative's house in another state.

FROM BILL

If it still won't connect

Don't spend your whole afternoon on it. Turn to Chapter 24, and if that doesn't do it, call me. Usually it's one small setting on the router, and it's a quick fix with a second pair of eyes.

CHAPTER 8

Your Window AC and Ohio Winters

A window unit that stays in all winter lets cold air and drafts in around it and can shed heat you paid for. In Northeast Ohio, most people take them out once the cooling season is clearly over and put them back in late spring. Here's how to do it without hurting yourself or the unit.

Before you take it out

1. Pick a dry, mild day, and get a helper. Window units are heavy and awkward, and most of the weight hangs outside the window.
2. Turn the unit off and unplug it from the wall.
3. Run it on **fan only** for a while on a dry day beforehand, if you remember, to help dry the inside.
4. Take out and wash the filter. Let it dry fully before you put it back.

Taking it out and storing it

1. With your helper holding the unit, remove any brackets or screws that hold it in the window. Keep them together in a labeled bag taped to the unit.
2. Lift the window sash and draw the unit in, carefully and level. Tip it slightly back toward the outside first if water is still sitting inside.
3. Store it upright, the way it sits in the window, in a dry place: a basement, garage shelf or closet.
4. Cover it loosely to keep dust and critters out.
5. Close and lock the window, and put back any storm window.

STAY SAFE

Your back comes first

If lifting a window unit is more than you should be doing, it's fine to leave it in and seal it, or to ask family or a handy neighbor. Getting hurt to save a little heat isn't a good trade.

If it stays in for the winter

- Buy a fitted cover for the **outside** of the unit made for this purpose, and secure it well.
- Seal the gaps around the side panels with weatherstripping or foam.
- Keep it unplugged so no one runs it by accident in the cold.

What happens to the smart side?

Nothing bad. When the unit is unplugged, the app simply shows it as offline. Next spring, plug it back in and it usually rejoins your Wi-Fi on its own — *if* your Wi-Fi name and password are the same. If you got a new router or changed the password over the winter, you'll need to set it up in the app again (Chapter 7).

TIP

A spring reminder

Put a reminder in your phone's calendar for May: "Check the AC: clean filter, test it, check the app." Finding a problem on a mild day beats finding it in the first heat wave.

PART 3

Mini-Splits & the AC You Already Own

Add-on controllers that teach your phone to speak "remote control," making sense of mini-split modes, and placing a controller so it actually works.

CHAPTER 9

Making Your AC or Mini-Split Smart with an Add-On Controller

You don't have to replace a perfectly good air conditioner to get phone control. If it came with a handheld remote, there's a good chance a small add-on controller can take over that remote's job. This is especially popular for mini-splits, which last many years and cost a lot to replace.

How these controllers work

Your AC remote talks to the unit with **infrared** light — the same invisible beam a TV remote uses. An add-on controller sits in the room, connects to your Wi-Fi, and sends those same infrared signals. When you tap "74 degrees, cool" in the app, the controller "presses the buttons" for you. Most also have a built-in thermometer, so the app can show the room's real temperature.

Two well-known makers

Product	Works with	Notable features (per the maker)
Sensibo (for example, Sensibo Air Pro)	Air conditioners and heat pumps controlled by an infrared remote: mini-splits, window, portable and ductless units	Works with Alexa, Google and Apple Home (Siri); "away" geofencing; **Climate React** automations; the Air Pro adds an air quality sensor
Mysa for Mini-Splits	Ductless heat pumps (mini-splits), window ACs and portable ACs	Learns your existing remote's signals during setup and then takes over control

What they cost

As of November 2026, these controllers generally sell for somewhere between about $100 and $200 each, depending on the model, the store and whether there's a sale. Mysa's own store has listed its mini-split thermostat at roughly $140 to $180. You need one controller for each indoor unit you want to control. Check the maker's website for today's price before you buy, and make sure the box lists your brand of air conditioner.

HEADS UP

One-way talk

Infrared only goes one direction: the controller sends commands but can't hear back from the air conditioner. If someone changes the setting with the old remote, the app may not know. The fix is simple: once the controller is set up, put the old remote in a drawer and use the app or the controller instead.

Is an add-on right for you?

- **Yes, if** your unit has an infrared remote, works well, and you'd like phone, schedule or voice control.
- **Yes, if** you have several mini-split heads and want them all in one app.
- **Maybe not, if** your unit's maker sells its own Wi-Fi adapter that you're happy with — some mini-split brands do, and an installer may have already fitted one.
- **No, if** your AC only has push buttons and no remote. These controllers need a remote's signals to copy.

WHAT THIS DOES FOR YOU

What this does for you

For about the price of a nice dinner out, a ten-year-old mini-split gets a phone app, schedules and voice control, and you can see the real temperature in that room from anywhere.

CHAPTER 10

Mini-Splits: Remotes, Modes & Smart Control

Mini-split remotes are famous for having too many buttons and too-small writing. The good news is you only need a few, and an app or add-on controller can show the same choices in big, clear words.

The modes, in plain English

Mode and its usual symbol	What it does
Cool (a snowflake)	Air conditioning. Cools and dries the air.
Heat (a sun)	On heat-pump models, warms the room. Not every mini-split heats.
Dry (a water drop)	Gently removes moisture without much cooling. Useful on muggy, mild days.
Fan (a fan blade)	Just moves air. No cooling or heating.
Auto (a circle of arrows or "A")	The unit picks heating or cooling to hold the temperature you set.

GOOD TO KNOW

Symbols vary

Most brands use similar pictures, but not all. If you're unsure, the user manual's first pages show what each symbol means on your model. Many makers post their manuals online; search for the brand and model number from the label on the unit.

Buttons worth knowing

- **Fan speed** — low, medium, high or auto. Auto is usually fine.
- **Swing** or **vane** — moves the louvers so air spreads around instead of blasting one spot.
- **Timer** — on or off after a set number of hours. A smart app's schedule is easier to use.
- **Sleep** — on many units, eases the temperature a little through the night for comfort.

Getting phone control on a mini-split

1. Find the brand and model on the indoor unit's label.
2. Check whether the maker offers a Wi-Fi adapter or app for that model. The installer may have fitted one already; look for a small box or a Wi-Fi light on the indoor unit, and check your paperwork.

3. If there isn't one, or it isn't available for your older model, an add-on controller that copies the remote (Chapter 9) works with most units that have an infrared remote.
4. Set up one unit first, live with it for a week, then do the others.

TIP

Heat pumps and Ohio winters

If your mini-split heats, schedules matter in winter too. Rather than big swings in temperature, many heat pumps do best holding a steady setting. Your installer's advice for your model is the best guide; ask them, or check the manual.

WHAT THIS DOES FOR YOU

What this does for you

Large, clearly labeled buttons on a phone screen are much easier to read than a small, crowded remote. Many people find the app easier than the remote for that reason alone.

CHAPTER 11

Placing an Add-On Controller So It Works

Because an add-on controller talks to the air conditioner with light, where you put it matters more than anything else. Get the spot right and it's reliable. Get it wrong and it seems to work only some of the time.

Line of sight

Mysa says its mini-split controller needs a clear line of sight to the indoor unit. Think of it like the TV remote: if you could point the remote from that spot and it would work, the controller will too. A plant, a lampshade or a cabinet door in the way will block it.

A good spot is

- Facing the air conditioner, with nothing in between.
- Within the distance the old remote works from — usually across a normal room.
- Near an outlet or USB charger, if your model plugs in.
- Somewhere it reads the room's temperature fairly: **not** in direct sun, not on top of a lamp or TV, and not right in the AC's cold blast.
- Within good Wi-Fi range. Check your phone's Wi-Fi bars at that spot.

HEADS UP

Don't put it in the air stream

If the controller sits where the cold air hits it, it will think the room is colder than it is and may turn the AC off early. A spot on a side wall or a shelf across the room usually works better.

Testing the spot

1. Put the controller where you think it should go and set it up in the app.
2. From the app, turn the AC on. Listen for the beep.
3. Change the temperature twice and the mode once, checking each time that the unit responds.
4. Close the curtains and turn on the lights you usually use in the evening, then test again; bright light can sometimes interfere with infrared.
5. Leave it a day and compare the app's room temperature with a regular thermometer.

WHAT THIS DOES FOR YOU

What this does for you

A well-placed controller means you stop wondering whether your tap "took." You set it, and the room does what you asked.

FROM BILL

Happy to place it for you

Mounting, placing and testing controllers for a couple of mini-split heads is the kind of job I can do with you in one visit, so everything's set up and working before I leave.

PART 4

Smart Fans

Ceiling fans with apps and smart wall controls, the right fan direction for summer and winter, and Wi-Fi tower and pedestal fans.

CHAPTER 12

Smart Ceiling Fans and Fan Controls

A ceiling fan is one of the cheapest ways to feel cooler, and there are several ways to control one from your phone or by voice. Which way makes sense depends on whether you're buying a new fan or keeping the one you have.

The three routes

Route	What it is	Good for
A new smart fan	A ceiling fan with Wi-Fi built in and its own app. Many work with Alexa or Google.	When you're replacing a fan anyway
A remote-control bridge	A small plug-in box that learns the signals of your fan's existing handheld remote and lets your phone send them.	Fans that already came with a handheld remote
A smart fan wall control	A replacement wall switch made specifically for ceiling fans, with speed control and an app.	Fans that are run from a wall switch with a pull chain set on high

STAY SAFE

Never use a regular light dimmer on a ceiling fan

A light dimmer is not built for a fan's motor and can make it hum, overheat or fail. If you want a smart wall control, buy one that says it is for **ceiling fans** on the box. And unless you're comfortable with home wiring, have an electrician or a qualified handyman install any wall control: turn the power off at the breaker first, every time.

Fan and light: two things in one

Many ceiling fans have a light kit. Depending on how the fan is wired, the fan and light may be controlled together or separately. A bridge or a fan with built-in Wi-Fi usually gives you separate control of each in the app. A wall control can only control what the wiring in the wall connects to, so check the product's instructions for fans with lights.

Before you buy anything

1. Look at how the fan is controlled today: a handheld remote, pull chains, a wall switch, or a mix.
2. Find the fan's brand and model. It's often on a label on top of the motor housing, or in the paperwork from when it was installed.

3. Check that whatever you're considering lists your type of fan as compatible. Products that copy a remote's signal have compatibility lists on their websites.
4. Decide whether you want voice control, and which assistant (Chapter 19).

HEADS UP

Pull chains and smart controls

If the fan is set to "off" with its pull chain, no app or wall control can turn it on. Before setting up any smart control, pull the chain so the fan runs, usually on high. The smart control then handles speed and on-off from there.

WHAT THIS DOES FOR YOU

What this does for you

No more climbing on a chair to reach a pull chain, or hunting for the fan remote under the couch cushions. "Turn on the bedroom fan" from bed is a small luxury that adds up over a summer.

TIP

See our Smart Plugs & Switches guide

Smart wall switches in general, and how to tell which ones need a neutral wire, are covered in detail in our Smart Plugs & Switches guide.

CHAPTER 13

Fan Direction & Fan Habits for Every Season

A ceiling fan doesn't lower the room's temperature; it moves air across your skin, which makes you *feel* cooler. That one fact explains how to use a fan well, and how a fan can save money when paired with an air conditioner.

Summer: blow down

In warm weather, the fan should push air straight down onto you. On most fans that means the blades turn **counterclockwise** when you stand underneath and look up. You should feel a breeze when you stand under it on a medium or high speed.

Winter: gently pull up

In cold weather, reverse it so the blades turn **clockwise** on a **low** speed. That gently pulls air up and pushes the warm air that collects near the ceiling back down along the walls, without making a chilly breeze.

Changing direction

1. Turn the fan off and wait until the blades stop completely.
2. Look for a small slide switch on the motor housing, just above or below the blades. Many fans have one.
3. Slide it the other way, then turn the fan back on and check which way the blades turn.
4. Smart fans and some remotes have a **reverse** button or app setting instead; check the app or the remote.

STAY SAFE

Steady footing first

Use a sturdy step stool with a handle, not a chair, and only with the fan off. If reaching the fan is a stretch, wait for a visitor to help. A fan that blows the "wrong" way for a season is not worth a fall.

Habits that save money

- **Fans cool people, not rooms.** Turn the fan off when you leave the room. A schedule or a "turn off" voice command makes this easy.
- With the AC running, a fan can let you feel comfortable at a slightly higher thermostat setting, and every degree you raise it in summer saves electricity.
- In winter, low and reversed is plenty. High speed in winter just makes a draft.

WHAT THIS DOES FOR YOU

What this does for you

Getting the direction right costs nothing, takes one minute twice a year, and makes the same thermostat setting feel more comfortable.

TIP

Set seasonal reminders

Add two reminders to your phone's calendar — one in late spring and one in mid-fall — that say "flip the fan direction." Pair the fall one with the window-AC tasks in Chapter 8.

CHAPTER 14

Smart Tower & Pedestal Fans

Floor fans now come with Wi-Fi too: tall, slim tower fans, classic pedestal fans on a stand, and combination fans that also purify the air or, in some cases, heat. They're handy where there's no ceiling fan, like a bedroom you'd rather not run the AC in all night.

What the app usually adds

- On, off, speed and oscillation (side-to-side swing) from your phone.
- Timers and schedules, such as "run until 1 a.m., then off."
- Night or sleep modes that dim the display lights and quiet the fan.
- Voice control through Alexa or Google on many models.

Smart fan or regular fan on a smart plug?

For a **simple fan** with a mechanical switch, one that comes back on by itself when power returns, a smart plug can give you on-off control and schedules for less money. Many newer fans, though, have electronic touch buttons and go back to "off" whenever they lose power. A smart plug can't press their buttons, so it can't turn them on. For those, a fan with its own app is the way to go. Chapter 17 explains smart plugs in more depth.

HEADS UP

Fans that also heat follow heater rules

Some combination units blow cool air in summer and heat in winter. When the heating is on, it is a space heater, and every rule in Chapter 15 applies — wall outlet only, three feet of clear space, and no extension cords or power strips.

Setting one up

1. Assemble the fan and plug it into the wall.
2. Download the app named in the instructions (or scan the QR code in the manual).
3. Follow the app's "add device" steps. The same 2.4 GHz Wi-Fi rule usually applies (Chapter 3).
4. Name it by room, for example **Bedroom Fan**.
5. Set a bedtime schedule and try a voice command if you use a voice assistant.

WHAT THIS DOES FOR YOU

What this does for you

A fan that turns itself off at 2 a.m. means a comfortable night without waking up chilly — and without waking up to turn it off.

TIP

Clean fans work better

Dust on fan blades and grilles cuts airflow and gets blown around the room. Unplug the fan and wipe the grille or blades every few weeks in summer, following the manual's cleaning directions.

PART 5

Space Heaters: Safety First

The safety rules every heater needs, what "smart" heaters and remote start really mean, and why smart plugs and big appliances so often don't mix.

CHAPTER 15

The Space Heater Safety Rules

If you read only one chapter of this guide, please make it this one. Electric space heaters are a comfort in an Ohio winter, but they draw a lot of power and get hot, and they're involved in a large share of the deadliest home heating fires. None of the rules below is complicated. They just have to be followed every time.

Rule 1: Plug it straight into the wall

The U.S. Consumer Product Safety Commission (CPSC) says to make sure the heater's plug fits tightly in the wall outlet — if it's loose, don't use that outlet for the heater — and to **never power a heater with an extension cord or power strip**. Most extension cords and power strips aren't made for the heavy, steady current a heater draws, and they can overheat.

The Electrical Safety Foundation adds one more: don't plug anything else into the same outlet as the heater.

Rule 2: Three feet of clear space, all the way around

The National Fire Protection Association (NFPA) says to keep anything that can burn at least **three feet** (one meter) away from heating equipment, including space heaters: curtains, bedding, furniture, clothing, papers, rugs piled up. The NFPA also asks for a three-foot "kid-free zone" around space heaters, and the same goes for pets.

Rule 3: Off when you leave the room or go to sleep

NFPA's guidance is to turn space heaters off when you leave the room or go to bed. That rule matters a great deal for smart heaters and schedules, as you'll see in Chapter 16.

Rule 4: Choose a tested heater

UL advises looking for the **UL Mark** when you buy a space heater, which means it was tested to a safety standard. Marks from other recognized test labs, such as ETL or CSA, show the same kind of testing. Be wary of unbranded heaters from unfamiliar online sellers.

More good habits

- Set the heater on a hard, level floor — not on a rug, a bed, a table or a chair.
- Look for **tip-over** and **overheat** shutoff on the box. Many newer heaters have both.
- Keep it out of walkways, where someone could trip on it or its cord.
- Never run the cord under a rug or carpet, and never use a heater to dry clothes.
- Feel the plug and outlet now and then. If the plug, cord, outlet or cover plate is **hot**, stop using the heater and have an electrician check the outlet.
- Make sure you have working smoke alarms on every level, and test them monthly.

STAY SAFE

This is the rule people break most

"Just for a minute" on a power strip or a household extension cord is how a lot of trouble starts. If the cord won't reach a wall outlet from a safe spot, move the heater or choose a different room, not a longer cord.

TIP

Smoke alarms that talk to your phone

Some smoke alarms can send an alert to your phone and to family members when they sound. They're a nice partner for anyone who relies on a space heater, especially someone who lives alone.

WHAT THIS DOES FOR YOU

What this does for you

Follow these rules and a space heater is a cozy, inexpensive way to warm the room you're actually sitting in, without heating the whole house.

CHAPTER 16

Smart Space Heaters, Timers & Remote Start

Some space heaters now have Wi-Fi, apps and voice control. The appeal is obvious: warm up the bathroom before your shower, or the bedroom before bed, without padding across a cold floor. Here's how to enjoy that safely.

What a smart heater adds

- Turn it on or off and set the temperature from your phone.
- Schedules, so it warms a room at the same time each day.
- Voice control on many models.
- A built-in thermostat, so it cycles on and off to hold a temperature instead of running flat out.

Remote start: the honest caution

Being able to switch a heater on from another room — or another town — sounds handy. But remember Rule 3 from Chapter 15: the fire safety advice is to turn a heater off when you leave the room or go to sleep. Turning one on when no one is there to see what's around it goes against that advice. A towel may have slipped off a rack, a cat may have dragged a blanket over, or something may have been set down too close since you last looked.

Safer ways to use the smart features

1. Use the app to turn the heater **off** — that's always the safe direction. Forgot it in the den? Turn it off from bed.
2. Use schedules for times you'll be **in the room**, such as "on at 6:30 a.m. while I'm getting ready, off at 7:15."
3. If you start it from another room in the house, go there soon and look it over.
4. Don't schedule it to run overnight while you sleep, or while you're away from home.
5. Use the thermostat setting, so it holds a comfortable temperature and doesn't run all out.

STAY SAFE

Check the manual before anything automatic

Read the heater's own instructions about timers, schedules and remote operation, and follow them. The manufacturer knows its heater; if the manual says to use it only while attended, that is the rule.

WHAT THIS DOES FOR YOU

What this does for you

A five-minute pre-warm of the bathroom while you're up and about, and a reliable "off" from your phone if you forgot — those are the smart heater features that make life easier without adding risk.

HEADS UP

Beware too-cheap "smart" heaters

Online marketplaces are full of no-name Wi-Fi heaters. Stick with known brands that carry a UL, ETL or CSA mark, and check the CPSC's recall list at cpsc.gov if you're unsure about one you own.

CHAPTER 17

Smart Plugs, Amps & Watts: Why ACs and Heaters Are Different

A smart plug is a little adapter that goes between the wall outlet and an appliance's plug, so an app can switch the power on and off. They're wonderful for lamps and simple gadgets. For air conditioners and especially space heaters, they're often the wrong tool. Here's why, in plain terms.

Amps and watts in one minute

Watts are how much power something uses. **Amps** are how much electrical current flows to do it. In an American home at about 120 volts, the math is simple: watts divided by 120 is roughly the amps. A typical household outlet circuit is 15 amps, which works out to about 1,800 watts.

Appliance	Typical power (check its label)	What it means
Lamp with LED bulb	About 10 watts	Tiny load. Fine on almost any smart plug.
Box fan or tower fan	Tens of watts	Light load; check the plug's rating anyway.
Window air conditioner	Hundreds of watts and up, plus a surge at start-up	Big load. Check its manual for outlet requirements.
Space heater on high	Often around 1,500 watts	Close to the most a regular outlet circuit can carry, for hours at a time.

The real numbers for your appliance are on its rating label or in its manual. The smart plug's maximum rating is printed on the plug, the box or the manual.

Why a smart plug and a space heater don't mix

The CPSC's advice is to plug a heater directly into the wall, and never into an extension cord or power strip. A smart plug is one more connection between the wall and the heater, carrying nearly the full load for hours. It also makes it easy to switch a heater on when nobody's in the room (Chapter 16). My advice is simple: **don't put a space heater on a smart plug**. If you want phone control of a heater, buy one with it built in, and still follow Chapter 15.

STAY SAFE

If you've already done it

If a heater is running through a smart plug right now, turn it off, unplug both, and plug the heater straight into the wall. If the smart plug or the outlet feels warm or looks discolored, don't use either, and have an electrician look at the outlet.

Smart plugs and air conditioners

Two problems come up. First, the load: many window units draw more than a small smart plug is rated for, and the AC's own manual may ask for a dedicated outlet with nothing else on it. Second, most modern ACs have electronic controls that go back to "off" when power is cut and restored. The smart plug turns the power on, but the AC just sits there waiting for someone to press its power button. For phone control of an AC, a model with Wi-Fi built in (Chapter 6) or an add-on controller (Chapter 9) is the right tool.

GOOD TO KNOW

Where a smart plug does shine

Lamps, a simple fan that comes back on by itself, holiday lights, a radio. Our Smart Plugs & Switches guide covers choosing and setting one up.

WHAT THIS DOES FOR YOU

What this does for you

Knowing which tool fits which appliance saves money on gadgets that won't work, and keeps the biggest power users in your home on the safest connection: straight into the wall.

PART 6

Schedules, Voice & Saving Energy

Letting the house run itself: schedules, "away" features, talking to your air conditioner, and honest ways to keep the electric bill down.

CHAPTER 18

Schedules & "Away" Features

The smartest thing a smart air conditioner can do is turn itself off when nobody needs it, and on shortly before somebody does. That's what schedules and "away" features are for.

Schedules

A schedule is a simple instruction that repeats: "On weekdays at 9:30 p.m., cool the bedroom to 72; at 7 a.m., turn it off." Every brand app covered in Chapter 6 offers some form of schedule or timer, and the menus differ. Look for words like **Schedule**, **Timer** or **Automation** on the unit's screen in the app.

Setting up a schedule

1. Open the app and tap the air conditioner.
2. Look for **Schedule** or **Timer**; it may be under a clock icon or a settings gear.
3. Choose the days (every day, weekdays, weekends).
4. Set the "on" time, the mode (cool) and the temperature.
5. Add a matching "off" time.
6. Save, then check the next day that it ran when you expected.

> TIP
> **Start simple**
> One evening "on" and one morning "off" covers most bedrooms. Add more only if you find yourself reaching for the app at the same time every day.

"Away" features (geofencing)

Geofencing means the app uses your phone's location to notice when you leave home and come back. You draw an invisible circle around the house; when the last phone leaves, the air conditioner can turn off, and when a phone heads back in, it can turn on. Sensibo, for example, lists geofencing among its features, along with **Climate React**, which turns the AC on or off based on the room's temperature or humidity.

- It needs location permission on the phone, set to "Always" for it to work in the background.
- Everyone who should count as "home" needs the app on their phone, signed in to the same household.

- It's only as reliable as the phone's location. If someone leaves their phone at home, the house thinks they're home.

HEADS UP

Not for space heaters

Never use geofencing or an away-from-home schedule to turn a space heater **on**. A heater should only run when someone is in the room (Chapter 15 and Chapter 16).

WHAT THIS DOES FOR YOU

What this does for you

You stop paying to cool an empty house while you're at church, the store or the grandkids' game, and still walk into a comfortable home.

CHAPTER 19

Voice Control: Alexa, Google & Apple Home

Asking out loud is often the easiest way of all: no phone to find, no remote to aim. Most smart air conditioners, add-on controllers and smart fans work with Amazon Alexa or Google's assistant, and some work with Apple's Siri through the Apple Home app.

How the connection works

The appliance stays in its own app. You then "link" that app's account to your voice assistant, one time. After that, the assistant can see the appliance and pass along your commands.

Linking to Alexa (general steps)

1. Make sure the air conditioner already works in its own app.
2. Open the **Alexa** app and go to **Skills** (sometimes under **More**).
3. Search for the brand — Frigidaire, GE Appliances, Midea, LG or the controller's maker — and enable its skill.
4. Sign in with the same email and password you use in the brand's app, and allow access.
5. Let Alexa discover devices. The air conditioner appears with the name you gave it.

Frigidaire's instructions add a useful detail: the air conditioner and the Echo device should be on the same Wi-Fi network, and you log in with your Frigidaire account when linking.

Linking to Google (general steps)

1. Make sure your Google or Nest speaker is already set up in the **Google Home** app.
2. In the Google Home app, tap to add a device and choose the option for a device that works with Google.
3. Search for the brand, sign in with the brand app's account, and allow access.
4. Assign the air conditioner to a room.

Frigidaire notes that if you have more than one unit, you can rename each in the Frigidaire 2.0 app, and the new names show up in the Google Home app.

Apple Home and Siri

Some products work with Apple Home, which lets you use Siri on an iPhone, iPad, HomePod or Apple Watch. Sensibo, for example, lists Siri and Apple HomeKit among the assistants it works with, along with Alexa and Google. Look on the box for "Works with Apple Home" or the Matter logo if you use Apple devices.

Things to say

- "Alexa, turn on the bedroom AC."
- "Hey Google, set the living room AC to 74."
- "Alexa, what's the temperature in the bedroom?" (if the device reports it)
- "Hey Siri, turn off the fan."

TIP

Names make or break voice control

Short, different names work best: **Bedroom AC**, **Den AC**, **Porch Fan**. Avoid two devices with almost the same name, and avoid names like "AC 1" that are hard to remember.

GOOD TO KNOW

What is Matter?

Matter is a shared standard that lets smart-home devices from different brands work with Alexa, Google and Apple Home. A Matter logo on the box means more choice about which assistant you use. It isn't required, and many good products don't have it yet.

WHAT THIS DOES FOR YOU

What this does for you

For anyone with arthritis, low vision or trouble getting up, being able to say "turn on the AC" from a chair is real independence.

TIP

More on voice assistants

Our Aging in Place Tech guide shows how voice assistants can help around the house in many other ways.

CHAPTER 20

Saving Energy Honestly

Advertisements love to promise big savings from smart gadgets. The honest truth is that a Wi-Fi chip saves nothing by itself. Savings come from three things: the right equipment, using it less, and keeping it in good shape.

1. The right equipment

- **Size it right** (Chapter 4). ENERGY STAR notes that an oversized unit costs more to buy, wastes energy and doesn't cool better.
- **Look for the ENERGY STAR label.** Certified room air conditioners use less electricity than standard models for the same cooling.

One more point of general advice: where a window unit fits, it's usually the better choice than a portable unit for the same room, because the portable sits inside and has to push all of its heat out through a hose.

2. Use it less, without being uncomfortable

- Cool the room you're in, not the whole house. That's the whole point of a room unit.
- Use schedules and "away" features (Chapter 18) so nothing runs in an empty room.
- Run a ceiling fan with the AC and nudge the temperature up a degree or two (Chapter 13).
- Close blinds and curtains on sunny windows during the hottest part of the day.
- In winter, warm the room you're sitting in with a space heater only while you're there, and only following Chapter 15.

3. Keep it in good shape

- Clean the filter as often as the manual says. Many units also remind you with a filter light or an app notice. A clogged filter makes the unit work harder.
- Keep the outside of a window unit or a mini-split's outdoor unit clear of leaves and plants.
- Seal gaps around a window unit with the foam strips that came with it.
- Have a mini-split professionally serviced as its maker recommends.

HEADS UP

Be skeptical of "cut your bill in half" claims

Gadgets sold with dramatic savings promises — especially "power saver" boxes that plug into an outlet — don't change how much power your air conditioner or heater actually uses. Your utility's own website is a trustworthy place for efficiency tips and any rebates.

WHAT THIS DOES FOR YOU

What this does for you

These habits are free or nearly so, and they work whether your equipment is smart or not. The smart features just make the habits automatic.

TIP

Central air?

If you have central air and a furnace, the biggest smart savings usually come from the thermostat. See our Smart Thermostats guide.

PART 7

Keeping Loved Ones Comfortable & Safe

Heat waves, checking on a parent's home from a distance, and getting through cold snaps and power outages.

CHAPTER 21

Heat Waves and Older Adults

Ohio summers bring a few stretches every year when the heat and humidity really build. Older adults are more vulnerable to heat than younger people: the body doesn't cool itself as well with age, some medicines make it harder to handle heat, and many people simply don't feel thirsty or hot as quickly. A smart setup can help, but the most important tools are plain and simple.

Before the heat arrives

1. Test the air conditioner in late spring (Chapter 8). Clean the filter.
2. Make sure at least one room — usually a bedroom — can be kept cool around the clock.
3. Set a sensible schedule so that room is already cool before the afternoon peak.
4. Put a simple thermometer, or a smart one (Chapter 22), in the room where the person spends most time.
5. Know where your community's cooling options are, such as a library, senior center or mall, in case the power or the AC fails.

During a heat wave

- Keep the cool room cool. Don't turn the AC off to save money on the hottest days.
- Drink water regularly, even without feeling thirsty, unless a doctor has said otherwise.
- Close blinds on sunny windows. Save chores and errands for the cooler morning.
- Fans help, but in very high heat a fan alone may not be enough to keep a person safe. Air conditioning, or time in an air-conditioned place, matters most.
- Family and neighbors: check in at least once a day, by phone or in person.

STAY SAFE

When to call 911

If someone in the heat becomes confused, faints, has trouble speaking, or seems very ill, call 911 right away and move them somewhere cooler while you wait. Don't wait to see whether it passes.

TIP

Ask about medicines

If you or a parent takes daily medicines, it's worth asking the doctor or pharmacist whether any of them affect how the body handles heat, and what to watch for.

How smart features help in a heat wave

- Family can see from their own phone whether the AC is on and how warm the room is.
- A schedule makes sure the cooling starts even if someone forgets.
- A voice command turns it on for someone who can't easily get up.
- A temperature alert (Chapter 22) can warn family if a room gets too hot.

WHAT THIS DOES FOR YOU

What this does for you

Peace of mind for everyone: the person at home stays cool without having to think about it, and family members can glance at a phone instead of worrying all afternoon.

CHAPTER 22

Checking on a Parent's Home from Afar

One of the kindest uses of smart cooling and heating isn't for yourself at all. If a parent lives alone, being able to see that their home is a safe temperature — and to get a warning if it isn't — can take a great weight off a family's mind.

Talk first, set up second

Before you install anything, sit down with your parent and explain what it does and what it doesn't do. A temperature reading isn't a camera, but it's still their home. Agree on who can see what, and what will happen if an alert goes off — a phone call first, then a visit, for example.

Three ways to keep an eye on the temperature

Approach	What you see	Things to know
The AC or controller's own app	Whether the unit is on, its setting, and often the room temperature	Share access with family by signing in to the same household account, or using the app's share or invite option if it has one.
A Wi-Fi temperature sensor	The room temperature (often humidity too), with alerts if it goes above or below limits you set	Small and inexpensive. Some need a small hub plugged into the router. Put one in the main living area.
A smart thermostat	The whole-house temperature, for homes with central air or a furnace	Covered in our Smart Thermostats guide.

Setting up a temperature alert

1. Pick a sensor that sends phone alerts for both high and low temperatures. Read the box for "alerts" or "notifications."
2. Set it up on your parent's Wi-Fi with the maker's app, then invite or sign in the family members who should get alerts.
3. Choose sensible limits. For example, an alert if the living room goes above about 85 degrees in summer or below about 60 in winter. Adjust to your family's comfort and advice from their doctor.
4. Turn on notifications for the app on each family member's phone.
5. Test it: breathe on the sensor or hold it in your hand briefly to see the reading change, and confirm everyone can see it.

HEADS UP

An alert only works if the Wi-Fi and power do

If the power goes out, the sensor and the router usually go out too, and no alert may arrive. Some apps send an "offline" notice; turn that on if yours has it. Treat a sensor that's gone quiet as a reason to call.

WHAT THIS DOES FOR YOU

What this does for you

A quick look at your phone answers "Is Mom's house too hot?" without a phone call that might sound like nagging. And if something does go wrong, you know about it the same day.

TIP

More ideas for helping from a distance

Our Aging in Place Tech guide covers other gentle check-in tools, from video calling to medication reminders and emergency buttons.

CHAPTER 23

Cold Snaps and Power Outages

Northeast Ohio winters can bring sudden deep cold and ice storms that knock out power. Here's how your heaters and smart gear fit into getting through them safely.

During a cold snap

- Use a space heater only in the room you're in, and only following Chapter 15.
- If a parent depends on a space heater, check that it's on a wall outlet, well clear of bedding and curtains, and that they turn it off at bedtime. A warmer blanket is safer than a heater left running overnight.
- A low-temperature alert on a sensor (Chapter 22) can warn the family if the furnace quits.
- Keep the furnace serviced and its filter changed. A space heater is a supplement, not a replacement.

When the power goes out

1. Turn off or unplug space heaters and air conditioners so they don't all come back on at once when the power returns.
2. Leave one lamp switched on so you'll know when power is back.
3. Use flashlights or battery lanterns, not candles, where you can.
4. If you leave to stay warm elsewhere, tell family where you're going.

> **STAY SAFE**
>
> **Generators and fuel-burning heaters**
>
> Never run a generator, grill or camp stove indoors, in a garage or near a window or door: the exhaust contains carbon monoxide, which you can't see or smell and which can kill. Have working carbon monoxide alarms on every level of your home.

When the power comes back

- Many modern air conditioners and heaters come back **off** after an outage; some return to their last setting. Check each one rather than assuming.
- Smart devices need a few minutes to rejoin Wi-Fi after the router restarts. Give it ten minutes before troubleshooting (Chapter 25).
- Check that schedules and the clock in each app are still right.

- Walk past each heater before turning it back on to make sure nothing has been moved near it.

GOOD TO KNOW

Battery backup has limits

A plug-in battery backup or a portable power station can keep a router and a phone charger going for a while. A space heater drawing around 1,500 watts, though, would drain most of them quickly. They're for small electronics, not heat.

WHAT THIS DOES FOR YOU

What this does for you

A plan made on a calm day means fewer hard decisions in the dark and the cold, and a family that knows what to check when the lights come back on.

PART 8

When Things Go Wrong

Calm, in-order fixes for setups that won't connect, units that went offline, and the fake "support" numbers that prey on frustrated owners.

CHAPTER 24

"It Won't Connect": Fixing Wi-Fi Setup

Setup failed, the app spins and gives up, or it says the password is wrong when you know it isn't. This is the most common smart-appliance frustration, and it's nearly always fixable. Work down this list in order, trying setup again after each step.

1. Make sure it's 2.4 GHz

Midea, LG and Frigidaire all say their appliances connect only to 2.4 GHz Wi-Fi. Midea's advice when setup fails is to start over and make sure you pick the 2.4 GHz network, not the 5 GHz one, and to check that the router has 2.4 GHz turned on.

- If your Wi-Fi shows two names (often one ending in "-5G"), connect your phone to the one **without** 5G before setup, and choose that one in the app.
- If it shows one name, it's probably combining both bands. Frigidaire notes some dual-band and mesh systems need to be manually switched to 2.4 GHz for setup. Many router apps have a temporary setting for this; your internet provider can help, or call me.
- Midea also suggests having the phone "forget" other nearby networks it might jump to during setup.

2. Check the password, character by character

- Passwords are case-sensitive: capital and small letters must match.
- Tap the little eye icon in the app, if there is one, to see what you typed.
- Frigidaire suggests avoiding quote marks, slashes, backslashes and & signs in the Wi-Fi name and password, because some appliances can't handle them.

3. Distance and signal

LG explains that an "incorrect password" message can actually mean the router is too far away. Its suggestions: move the router or the unit closer if you can, add a Wi-Fi extender, or unplug the router for a short time and try again.

4. Phone permissions

- On an iPhone, the app needs **Local Network** access. LG notes its app needs this to add products. Check in the iPhone's **Settings** app, under the app's name.

- Keep Bluetooth and location turned on during setup; many apps use them to find the appliance.
- Keep the app open and the phone unlocked until setup finishes.

5. Reset the appliance's Wi-Fi and start over

Each brand has a way to put the Wi-Fi back into pairing mode. Frigidaire, for example, suggests holding the appliance's Wi-Fi button for about 10 seconds until it beeps, then repeating the setup steps. LG units often use a button held on the remote for about three seconds, with the exact button printed on the back of the remote. Your manual has the steps for your model.

6. Still stuck? Call the maker or me

Brand	Official help
GE Appliances	Connected Home Support line, 1-800-220-6899, for wrong-password or communication failures during setup
Midea (U.S.)	1-866-646-4332, or the Help menu inside the SmartHome app
LG and Frigidaire	Use the support or contact page on the official website, or the help section in the app

SCAM ALERT

Get support numbers from the official site or the app

Type the brand's web address yourself or use the help menu in the app. Don't call a number from a search ad or pop-up. Chapter 26 explains why.

CHAPTER 25

"It Went Offline" & After a Power Outage

It was working fine, and now the app says **offline**, or the air conditioner ignores your taps. The unit itself is almost always fine. Something between it and your phone has hiccuped.

First, the quick checks

1. Does the unit still work with its own buttons or remote? If not, it's a power problem, not a Wi-Fi one; see the next section.
2. Is your home internet working? Try a website on your phone with Wi-Fi on.
3. Close the app completely and open it again.
4. Wait ten minutes. After a power blip, the router and then the appliance need time to reconnect.

If the unit has no power

- Check that it's firmly plugged into the wall.
- Many window air conditioners have a large plug with **TEST** and **RESET** buttons. If it has tripped, press **RESET**. If it trips again right away, unplug the unit and call for service.
- Check your electrical panel for a tripped breaker. If a breaker keeps tripping, stop and call an electrician.

If it has power but stays offline

1. Unplug the router (and modem, if separate) for 30 seconds, plug it back in and wait for it to come fully back up.
2. Unplug the air conditioner for a minute, then plug it back in. Turn it on with its own button.
3. Look at the unit's Wi-Fi light. On GE units, for example, a **WiFi Connect** light that stays solid while the app can't see the unit means it isn't showing up in GE's online service; GE suggests closing and reopening the app.
4. If it still won't come back, remove the unit from the app and set it up fresh (Chapter 7).

The usual cause: something changed with the Wi-Fi

- A new router or new internet provider.
- A changed Wi-Fi name or password.
- A router update that changed how it handles the 2.4 GHz band.

In any of these cases, the appliance is still looking for the old network. Set it up again in the app with the new details, and it will be back.

TIP

When you replace the router

If you or your internet provider install a new router, giving it the **same** Wi-Fi name and password as the old one lets most smart devices reconnect on their own, saving you from setting up each appliance again.

WHAT THIS DOES FOR YOU

What this does for you

Knowing the order — power, internet, restart, then re-setup — turns "it's broken" into a ten-minute fix most of the time.

GOOD TO KNOW

More help for offline devices

Our Smart Plugs & Switches guide has more on why smart devices drop off Wi-Fi and how to keep them connected.

CHAPTER 26

Scams: Fake Support Numbers & Too-Good Deals

When an air conditioner won't connect in the middle of July, people are hot, frustrated and in a hurry. Scammers count on that. Two tricks come up most with home appliances: fake support lines and fake bargains.

Fake "support" numbers

Search for "[brand] air conditioner support phone" and you may see ads and websites that look official but aren't. The person who answers may ask to "connect to your phone or computer," ask for a credit card to "activate" your Wi-Fi, or sell a pricey "protection plan."

SCAM ALERT

Real support never asks for gift cards or remote access to fix an AC

No appliance maker charges a fee to connect your air conditioner to Wi-Fi, and none will ask you to pay with gift cards, cryptocurrency or a payment app. If a caller asks for any of those, hang up.

How to find the real number

1. Look in the paper manual or on the unit's label.
2. Use the **Help** or **Support** section inside the brand's own app.
3. Type the brand's website address yourself (for example, geappliances.com, midea.com, lg.com, frigidaire.com) rather than clicking an ad.
4. Write the real number on your Cheat-Sheet (Chapter 28) once, so you never have to search for it again.

Too-good "smart" deals

- A Wi-Fi air conditioner at half the price of every other store, on a site you've never heard of, is a warning sign. So is a social media ad with a countdown timer.
- Very cheap no-name space heaters may skip safety testing. Look for a UL, ETL or CSA mark (Chapter 15).
- Unsolicited calls or door-to-door sellers offering "free" energy audits or rebates often lead to high-pressure sales. Call your utility directly to ask about real programs.

SCAM ALERT

"Your account will be closed" messages

An email or text saying your appliance app account is locked and asking you to "verify" with a link is a classic phishing trick. Open the app yourself instead. If it works normally, the message was fake.

FROM BILL

Not sure? Ask before you pay

If someone is pushing you to pay, connect or decide right now, hang up and call me at (330) 200-8042. A real company will still be there tomorrow.

PART 9

Help & Quick Reference

When a hand is worth it, and a one-page summary of everything that matters.

CHAPTER 27

When to Call Bill

This guide is meant to carry you through on your own, and most people manage most of it just fine. But there are times when a second pair of hands, or a second pair of eyes, saves a lot of frustration. Here's an honest list.

Good times to call

- The app just won't connect after you've worked through Chapter 24.
- Your router combines 2.4 and 5 GHz and you're not sure how to change it for setup.
- You'd like add-on controllers placed and set up on several mini-split heads at once (Chapter 11).
- You want everything — air conditioners, fans and sensors — in one app or linked to Alexa, Google or Apple Home, with sensible names and schedules.
- You'd like a parent's home set up with temperature alerts that the whole family can see (Chapter 22).
- You'd like someone to walk through the house with you and look at where the space heaters sit, which outlets they use and which plugs feel warm.
- You simply want it done, explained once, and written down for you.

When to call someone else

- **An electrician** for outlets that feel hot, breakers that keep tripping, new outlets, or installing a wired fan control or wall switch.
- **An HVAC technician** for a mini-split that isn't cooling or heating properly, leaks, odd noises or refrigerant problems.
- **The manufacturer** for warranty repairs and recalls.
- **911** for any fire, smoke, burning smell that won't go away, or a person in distress from heat or cold.

What working with me is like

I serve Portage County, Ohio, and I bring more than 30 years of professional experience with technology. We go at your pace. I explain what I'm doing as I do it, I write down anything you'll need later, and I don't sell gadgets — if what you already own will do the job, I'll tell you so.

FROM BILL

Book a time

$49 remote · $99 in your home. Call **(330) 200-8042** or book online at **billshometech.com/book**. Remote help works well for app and Wi-Fi problems; an in-home visit is best for placing controllers, checking heaters and outlets, and setting up several rooms at once.

GOOD TO KNOW

Meet Sophie

When you call or visit the website, you may be greeted by Sophie, my AI receptionist. She can answer common questions and book a time for you, and I'll take it from there.

CHAPTER 28

Your Smart Cooling & Heating Cheat-Sheet

Everything that matters, in one place. Keep this page handy on your phone or computer.

The essentials

Topic	Remember
Right size	Use the ENERGY STAR chart (Chapter 4). Bigger isn't better.
Wi-Fi	Air conditioners need 2.4 GHz Wi-Fi. Check the password character by character.
The apps	Midea: SmartHome. GE Appliances: SmartHQ. LG: LG ThinQ. Frigidaire: Frigidaire 2.0.
Old AC or mini-split	An add-on controller (such as Sensibo or Mysa) copies the remote. Keep it in line of sight.
Ceiling fan	Summer: counterclockwise, blowing down. Winter: clockwise on low.
Space heater	Wall outlet only. No extension cords, power strips or smart plugs. Three feet clear. Off when you leave the room or go to bed.
Smart plugs	Lamps and simple fans, yes. Space heaters, no. Most ACs, no.
Voice	Link the brand app to Alexa, Google or Apple Home. Use short, different names.
Saving money	Schedules, "away" features, fans with AC, closed blinds, clean filters.
Support numbers	From the manual, the app or the official website — never a search ad.

Write it down once

Item	Yours
Wi-Fi name (2.4 GHz)	_____
Wi-Fi password	_____
App name(s)	_____
App account email	_____
Air conditioner brand and model	_____
Mini-split brand and model	_____
Space heater brand and model	_____
Maker's support number (from manual)	_____
Filter last cleaned	_____
Electrician / HVAC company	_____
Bill's Home Tech	(330) 200-8042 · billshometech.com/book

When something's wrong, in order

1. **Smoke, burning smell, or a hot plug or outlet?** Turn the heater or unit off, unplug it if it's safe to, and call 911 for any fire or smoke. Have an electrician check the outlet.
2. **No power?** Check the plug, press RESET on the plug if it has one, and check the breaker.
3. **Works with buttons but not the app?** Check your internet, close and reopen the app, wait ten minutes.
4. **Still offline?** Restart the router, then unplug the unit for a minute.
5. **New router or password?** Set the unit up again in the app (Chapter 7).
6. **Won't connect at all?** 2.4 GHz, password, distance, phone permissions (Chapter 24).
7. **Still stuck?** The maker's official support, or call Bill at (330) 200-8042.

WHAT THIS DOES FOR YOU

What this does for you

A cool bedroom in July, a warm reading chair in January, a lower bill, and a family that can rest easy. That's what this is all about.