



An Extended Guide · No. 1661

Medical-Equipment Power Safety and Your Generator

A generator is one layer
— not the whole plan

Tech Made Simple — Service Made Personal

BillsHomeTech.com · (330) 200-8042 · Atwater, Ohio

Free & printable — share it with someone who needs it



Book a visit —
billshometech.com/book

! Read this first — carbon monoxide is the real danger

A running generator's exhaust contains carbon monoxide — an invisible, odorless gas that can kill in minutes. Never run a generator indoors, in a garage, in a shed, or on a porch, not even with the door open and a fan going. Run it outside only, well away from the house — the safety agencies say at least 20 feet — with the exhaust pointed away from every window, door, and vent. Put battery-backup carbon-monoxide alarms on each floor and outside the bedrooms. If an alarm sounds, or anyone feels dizzy, sick, or sleepy, get everyone into fresh air first and ask questions later. The generator keeping equipment running is still a CO source — outdoors only, 20-plus feet, alarms inside, and someone fragile needs that margin most.

When someone at home depends on power

If you or someone you love depends on equipment that needs electricity — oxygen, a breathing machine, a powered chair, a fridge full of medicine — an outage is more than an inconvenience. A generator is a wonderful help. It is also just one piece of a good plan, and I want to help you build the whole plan.

I'm Bill. For 30-plus years I've helped folks around Portage County set up and test the gear in their homes. I'm a patient tech helper, not a doctor or a nurse, so I won't give you medical advice — that's for your physician and your equipment supplier. What I can do is help you set the generator up safely, test it before you ever need it, and line up a licensed electrician for any panel work.

The single most important idea in this whole guide is gentle but firm: a generator is one layer, never the whole plan. If everything rested on the generator alone — and it ran out of fuel, or wouldn't start, or an outage stretched on for days — that's a risk no one should carry. So we build in layers, calmly, ahead of time.

★ There's no silly question here

This is exactly the kind of setup I take seriously and never rush. If you'd like a hand getting a safe, layered plan in place at your own home, call or text me at (330) 200-8042.

The 60-second version

If you read nothing else in this guide, read this page — and share it with whoever helps care for the person who depends on power.

- ❑ A generator is one layer of the plan, never the whole plan. Build in backups that don't rely on it.
- ❑ Keep manufacturer-approved battery backups and car (12-volt) adapters charged and ready before an outage.
- ❑ Oxygen users: keep backup tanks from your supplier that need no power at all, and know how to switch to them.
- ❑ Register with your electric utility's medical or priority-restoration list, and tell your equipment supplier your outage plan.
- ❑ Sensitive electronics do best on an inverter's clean, steady power, or protect them with a UPS or battery that also bridges the gap while the generator starts.
- ❑ If equipment fails and backup is running low, or someone has trouble breathing, chest pain, confusion, or blue lips — call 911.

! The generator is still a carbon-monoxide source

It runs outdoors only, at least 20 feet from the house, exhaust pointed away, with battery-backup CO alarms inside. Someone medically fragile can be affected by CO faster, so that safety margin matters even more.

Why a generator is one layer, not the whole plan

A generator is a strong layer of protection. It is not, by itself, a safe plan for someone whose health depends on power. Here's the honest reason why.

Any single thing can fail. A generator can run low on fuel in the middle of the night, refuse to start in the cold, or simply not be enough for an outage that lasts days instead of hours. If the whole plan rests on one machine, then one bad moment puts someone at risk.

So we think in layers instead. The device's own battery covers the first minutes. A car adapter or a small battery covers a bit longer. Backup oxygen tanks need no power at all. The generator covers the longer haul. And a place to go covers the outage that just won't quit. Each layer catches what the one before it might miss.

✓ Layers give you calm

The point of layering isn't worry — it's the opposite. When you know there's a backup behind every backup, an outage becomes something you walk through calmly instead of scramble against.

Start by knowing your devices

Before you can protect the equipment, it helps to write down exactly what needs power and what each one already has for backup.

Take a quiet afternoon and make a simple list. For each device, note whether it has its own battery, how long that battery lasts, whether it can run from a car's 12-volt outlet, and what your supplier recommends for a power failure. This one page becomes the backbone of your whole plan.

- Oxygen concentrator — and how much backup tank supply you keep on hand.
- CPAP or BiPAP machine — and whether you have its battery pack or a 12-volt adapter.
- Ventilator — and the internal and external battery run time your supplier specifies.
- Nebulizer — and whether a battery or car-adapter model is available.
- Powered wheelchair or scooter — and how you keep its battery charged during an outage.
- Medication refrigerator — and how long it holds temperature with the door kept shut.

★ I'm glad to help you build the list

Reading the fine print in a stack of manuals is a lot. On a visit I can help you find each device's battery time and backup options and get it all on one clear page. Call me at (330) 200-8042.

Keep battery backups and car adapters ready

The fastest, simplest layer is often a charged battery — but only if it's actually charged when the lights go out.

Many devices offer a manufacturer-approved battery pack or a 12-volt car adapter. These are your bridge for the first stretch of an outage and for the minutes while a generator is being started. The catch is simple: a backup battery only helps if it's kept topped up, so it needs a place in your routine, not just your closet.

- Use only the battery packs and adapters the maker approves for that device — not a generic substitute.
- Keep them charged on a schedule you won't forget, and check them the same day you test your smoke and CO alarms.
- Keep the car adapter in a known spot, and remember a running car must be outdoors — never charge from a car in a closed garage.
- Label each battery with what it fits, so no one has to guess in a hurry.

✓ Tie it to a habit you already have

Pick something you do like clockwork — the first of the month, or when you change a clock — and make 'check the backup batteries' part of it. A charged battery you never think about is the goal.

For oxygen: keep tanks that need no power

If someone in the home uses an oxygen concentrator, this page matters most — because the safest oxygen backup needs no electricity at all.

A concentrator makes oxygen from the air, and it needs power to do it. Compressed or liquid backup tanks from your oxygen supplier don't — they simply hold oxygen ready to breathe, generator or no generator. That makes them the layer that keeps working when everything electrical has stopped.

Ask your supplier how many backup tanks they recommend for your situation and how long each one lasts at your prescribed setting, and make sure everyone in the home knows how to switch over to a tank and how to tell when it's running low. That's a conversation for your supplier and doctor — I'll gladly help with everything around it.

! Backup tanks are the layer that never loses power

Keep them stored safely per your supplier's instructions, keep them full, and never let the supply run down. When power and the generator both fail, the tanks are what carry you to the phone to call for help.

Register with your utility and your supplier

Two phone calls, made calmly today, can put real help on your side during an outage. Neither one costs anything but a few minutes.

Most electric utilities keep a medical or priority-restoration list for households where someone depends on powered equipment. Being on it can mean advance notice of planned work and, where possible, quicker attention when the power goes out. It does not replace your own backups — it adds to them.

- Call your electric utility and ask how to join their medical or priority-restoration program, and what documentation they need.
- Tell your equipment supplier your outage plan, and ask what they provide — backup tanks, loaner batteries, or emergency support.
- Keep both phone numbers, your account number, and your device list somewhere you can grab in the dark.
- Update them if your equipment or your phone number changes.

★ I can sit with you while you make the calls

If the phone tree or the paperwork feels like a hassle, that's the sort of thing I help with all the time. We can make both calls together on a single visit. Reach me at (330) 200-8042.

Clean, steady power for sensitive electronics

Delicate medical electronics are happiest on clean, steady power — and not every kind of power is equally smooth.

An inverter generator produces power that's clean and steady, closer to what comes from the wall, which suits sensitive electronics well. A conventional generator's power can be rougher, so a good approach there is to protect the device with a UPS — an uninterruptible power supply, a battery-backup unit — which both steadies the power and bridges the gap while the generator starts. Our guide on choosing a generator covers the inverter points in more depth.

Always follow your device maker's guidance on what it can and can't be plugged into. When in doubt, a UPS between the device and the power is a gentle, forgiving layer — it keeps the device running through the brief silence between the power going out and the generator coming up to speed.

✓ A UPS buys you seconds that matter

That quiet moment while a generator is started can be enough to interrupt a device. A UPS or battery in between smooths it right over, so the machine never even notices the handoff.

Have a place to go for a long outage

Sometimes the safest, kindest plan for a long outage isn't to power through at home — it's to go somewhere that already has power.

For an outage that stretches on — a bad ice storm, a days-long event — the most reliable layer of all can be a warm, powered place to stay. Decide in advance where that would be and what it takes to get there, so the decision isn't being made in a stressful moment.

- A relative's or friend's home with reliable power, agreed on ahead of time.
- A short list of what travels with you — devices, chargers, backup tanks, medications, and the device list.
- How you'll get there safely, and who to call if you need a hand moving equipment.
- A note of any place your doctor or supplier suggests for people who depend on power.

✓ Deciding early is the whole trick

A relocation plan is only calming if it's made before you need it. Ten quiet minutes now — where would we go, and what would we take — turns a frightening night into a simple drive.

When to stop troubleshooting and call 911

Backups and plans are for the ordinary outage. This page is for the moment that stops being ordinary — and the answer is simple.

If equipment has failed and your backup is running low with no quick fix in sight, that is not the time to keep tinkering. And if a person shows any of the signs below, don't wait to be sure — these are reasons to call for emergency help right away.

- Trouble breathing, or breathing that's working much harder than usual.
- Chest pain or pressure.
- Confusion, unusual drowsiness, or trouble waking someone.
- Blue or gray lips, face, or fingertips.

! When to call 911 — don't wait to be sure

If backup is running low with no fix, or someone has trouble breathing, chest pain, confusion, or blue lips, call 911 right away. You will never regret calling for help that turned out to be a false alarm — and telling the dispatcher the person depends on powered medical equipment helps them help you faster.

The generator itself is a carbon-monoxide source

Here's the part that ties this guide back to the most important rule in the whole category — and it deserves a careful word.

The very generator that keeps the equipment running is an engine, and its exhaust contains carbon monoxide — invisible, odorless, and able to kill in minutes. So it runs outdoors only, at least 20 feet from the house, with the exhaust pointed away from every window, door, and vent, and battery-backup CO alarms inside. Our guide on the 20-foot rule walks through all of this in depth.

There's a tender reason this matters even more here. Someone who is medically fragile — older, or living with a heart or lung condition — can be affected by carbon monoxide faster and more severely than a healthy adult. The safe distance and the alarms aren't red tape. For the person you're protecting, that margin is part of the care.

! Never trade CO safety for convenience

It can be tempting to run the generator close to the house, or under cover, to keep a cord short or stay out of the rain. Please don't. Keep it outdoors and well away, every time — the very person the generator is helping is the one who can least afford a mistake here.

Two kinds of homes, two sets of needs

Where you live shapes how long an outage might last and how far help is — so it shapes how many layers of backup you'll want.

If you live in town or the suburbs

In town or the suburbs, outages tend to be shorter, a hospital is usually closer, and your utility likely runs a medical or priority list worth joining. That's a real advantage — but it's not a reason to lean on the grid alone.

- Register with your utility's medical or priority-restoration program — being on the list is easiest where the crews are close.
- Even with short outages, keep device batteries and any backup tanks charged and full — storms don't check the map first.
- Know your nearest powered place to go, whether that's family across town or somewhere your supplier suggests.
- Remember the generator still runs 20-plus feet out with the exhaust away from your windows and the neighbor's, close lot or not.

If you are out in the country on a well

Out in the country, outages can run much longer, help and a hospital are farther away, and if you're on a well your water depends on power too. That's not cause for alarm — it's simply more reason to build every layer a little deeper.

- Plan for longer outages — more device battery capacity, more backup tanks, and enough fuel stored safely for the generator.
- Because water may stop when the power does, keep drinking water set aside as part of the same plan.
- Have your relocation plan firmly in mind — the drive to a powered place is longer, so decide the details early.
- Farther from crews means the generator may run unattended overnight — fresh CO-alarm batteries and a safe, well-away spot matter more, not less.

★ Town or country, let's build your layers

Whether you're on a small in-town lot or acres out in the country, I'm glad to help you put a calm, layered plan in place and test it before you ever need it. Call (330) 200-8042.

Building your backup plan, step by step

Here's the whole plan on one page, in the order I'd tackle it. None of it is hard — it's mostly a few calls and a little habit.

- ❑ List every powered device and what backup each one already has.
- ❑ Stock and charge the batteries, car adapters, and backup oxygen tanks your supplier recommends.
- ❑ Register with your utility's medical or priority list, and tell your supplier your outage plan.
- ❑ Set the generator up safely — outdoors, 20-plus feet out — and test the hookup before you ever need it.
- ❑ Decide your relocation plan and post the emergency signs and 911 reminder where everyone can see them.

✓ You don't have to do it all in one day

Pick one line today — even just the device list — and the rest follows naturally. A plan built calmly over a couple of weeks beats a perfect plan you never quite start.

Test the plan before you need it

A plan you've never tried is really just a hope. A quiet practice run turns it into something you can trust.

On a calm, sunny day, walk the whole thing through. Start the generator in its safe spot, run a device from its battery and then from the generator, practice switching to a backup oxygen tank, and time how long a fully charged battery actually lasts. You'll find the little gaps now, when fixing them is easy.

- Confirm the generator starts and runs, and that your cords reach the safe, well-away spot.
- Practice the device handoff — battery to generator, and onto a backup tank — so it's familiar, not frightening.
- Check that every CO alarm works and has fresh batteries before you rely on the generator.
- Note anything that ran low faster than expected, and adjust your backups.

★ A practice run is a great first visit

Walking through your plan together, calmly, is one of my favorite visits — no pressure, no rush, just making sure it all works. Call or text me at (330) 200-8042.

Ask your doctor and supplier the medical questions

Some questions belong with the people who know the medicine. Here's where I hand you off, gladly, to your care team.

I can help you set up and test the equipment and the generator, but I'm not the one to tell you how long someone can safely go on a backup tank, what settings to use, or what to do medically in an emergency. Those answers come from your doctor and your equipment supplier, who know the person and the prescription.

So bring them your plan. Ask how much backup they recommend, how to tell when a supply is running low, and exactly what they want you to do if equipment fails. Write the answers down and keep them with your device list. A plan the whole team agrees on is the strongest plan there is.

✓ Bring your device list to the appointment

That single page you made earlier makes this conversation easy. Your care team can look at what you have and tell you exactly where to add a layer — no guesswork.

What I can help with — and what I can't

I like to be plain about my lane, so you always know who to call for what.

Think of me as the person who makes the practical side calm and safe: choosing and testing gear, setting the generator up the right way, and lining up the right licensed pro when the job calls for one. The medical decisions stay with your care team, and that's exactly as it should be.

- I can help: pick and test backups, set up the generator safely, check CO alarms, and organize your plan on paper.
- I can help: make the calls to your utility and supplier with you, and walk your household through the plan.
- I line up a licensed electrician for any panel work — transfer switches, interlocks, or a 240-volt hookup — and never do that work myself.
- I don't give medical advice — how much backup you need and what to do medically comes from your doctor and supplier.

★ One call, and we'll sort out who does what

If you're not sure whether something is my kind of job or your care team's, just ask — I'll tell you straight, and point you the right way. Reach me at (330) 200-8042.

Myths people believe — and the truth

A few comforting-sounding beliefs can leave a gap in the plan. Here's the honest version of each.

Myth	Fact
'The generator alone has us covered.'	It's one layer. Batteries, backup tanks, and a place to go cover what it can't.
'The device battery will last as long as we need.'	Battery time is limited and shrinks with age — know the real number and keep it charged.
'Our oxygen concentrator is our backup.'	It needs power. Tanks that need no power are the true backup for an outage.
'We don't need to register — we have a generator.'	The utility list adds notice and priority. It costs nothing and layers on top of your gear.
'A generator's power is fine for anything.'	Sensitive electronics prefer an inverter's clean power, or a UPS to steady it and bridge the start.

! A gap you can't see is still a gap

Every myth above feels reassuring, which is exactly why it's risky. When a belief would leave someone relying on a single point of failure, trust the layered plan instead.

Questions worth asking

A few plain questions that clear up most of what folks wonder about powering medical equipment.

Q: How long will my device run on its battery?

Check the manual or ask your supplier for the real, current number — and remember batteries fade with age, so test yours rather than trust the sticker.

Q: Can I run my oxygen concentrator on the generator?

Follow your device maker's and supplier's guidance on power. Even when you can, keep backup tanks that need no power for the moments the generator can't cover.

Q: Should sensitive equipment plug straight into the generator?

Prefer an inverter's clean power, or put a UPS between the device and the power to steady it and bridge the start. Always follow the device maker's guidance.

Q: How do I get on my utility's medical list?

Call your electric utility and ask about their medical or priority-restoration program. They'll tell you what paperwork they need.

★ Ask me the setup questions any time

For anything about the gear, the hookup, or the plan, I'm a call away. For the medical questions, your doctor and supplier are the right people — and I'll help you get ready for that talk. Reach me at (330) 200-8042.

Common Questions

The questions I hear most from families working through this guide, answered plainly and calmly.

Q: Isn't a generator enough on its own?

It's a strong layer, but not the whole plan. Fuel runs low, engines don't always start, and outages can outlast the fuel — so we keep batteries, backup tanks, and a place to go behind it.

Q: Does someone fragile really need to worry more about the exhaust?

Yes. Carbon monoxide can affect an older person or someone with a heart or lung condition faster, so the outdoors-only, 20-foot rule and the alarms inside matter even more.

Q: What's the very first thing I should do?

Make the device list, then charge everything and stock any backup tanks. From there the plan almost builds itself — register, set up the generator, and decide where you'd go.

Q: Who do I call in a real emergency?

911. If backup is running low with no fix, or someone has trouble breathing, chest pain, confusion, or blue lips, call right away and say the person depends on powered equipment.

! Keep this guide where you can find it

Tuck it in with your device list and your utility and supplier numbers. Revisit it once a year, or any time the equipment, the household, or the home changes.

Bringing it all together

Everything here points back to one calm idea: build layers, test them, and keep the generator itself safe.

The generator is a valued layer — but it lives alongside charged batteries, car adapters, backup oxygen tanks, a utility registration, clean power for sensitive gear, and a place to go if an outage drags on. Behind all of it stands the plainest rule of all: if backup is low or someone is in trouble, call 911.

For the pieces that reach beyond this guide, our guide on the 20-foot rule covers running the generator safely, the inverter points in our choosing guide help with clean power, and our outage game-plan guide helps you think through a long event. Any panel work — a transfer switch or interlock — is a licensed electrician's job, and I'll line that up for you.

★ Let's put your plan in place together

On a visit I'll help you build the device list, set up and test the generator safely, and make the calls that put help on your side. Call or text me at (330) 200-8042.

If you remember only a few things

Out of everything in this guide, these are the ideas worth carrying with you.

A generator is one layer, never the whole plan. Keep the other layers ready — charged batteries, car adapters, backup oxygen tanks that need no power, a utility registration, and a place to go. Keep the generator itself outdoors and well away, because it makes carbon monoxide too. And if backup is low or someone is in trouble, call 911.

! Say it back to yourself

Layers, not one machine. Backups charged and tanks full. Generator outdoors, 20-plus feet, alarms inside. And when in doubt, call 911. That's the whole plan, and it's built on care.

You don't have to do this alone

You just have to remember that a friendly, patient person is one call away.

I hope this guide made keeping powered medical equipment running safely feel a little less daunting and a lot more doable. Keep it in a drawer with your other home papers, come back to a page whenever you need it, and don't worry about memorizing anything.

When you'd rather have a hand, that's exactly what I do. I come to your home, work at your pace, and never make you feel rushed or silly for asking. A first visit is a flat \$99, and for the parts that don't need me on-site I can often help right on your screen for \$49. Every visit comes with a 30-day, come-back-free guarantee. I don't do the licensed electrical or gas work myself — for that I'll help you line up a trustworthy local pro.

★ Bill's Home Tech — real help, close to home

Call or text me at (330) 200-8042, or visit BillsHomeTech.com. Serving Atwater and all of Portage County. 30+ years of patient, plain-English tech help — and if you're ever not 100% happy with a visit, I'll make it right or refund it. That's a promise. — Bill

Layers of Backup

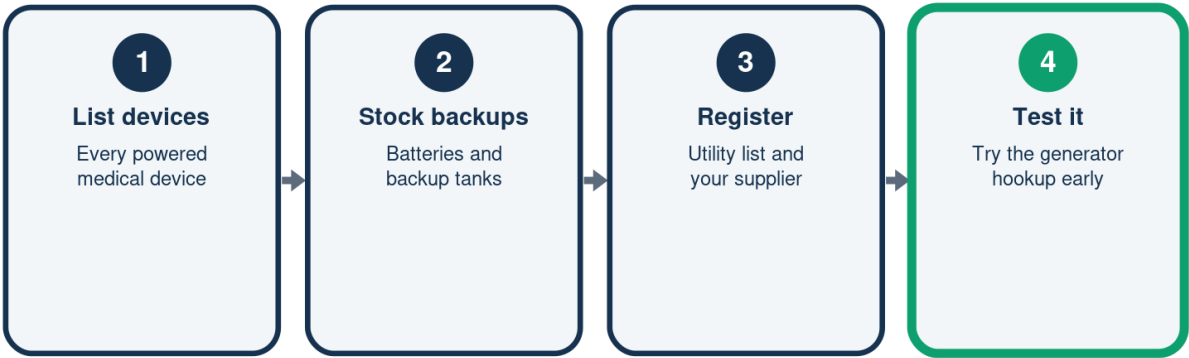
Every plan needs more than one

Layer		What it covers
Per device	Device battery	Runs that device
On the go	Car 12V adapter	Power in the car
Power-free	Oxygen tank	Breathing, no power
Whole house	The generator	Many things at once
Long outage	Relocation	Everywhere, days

A generator is one layer -- never the whole plan. Keep the others ready too.

Building Your Backup Plan

From a list to a tested setup



Bill helps set up and test the gear -- your doctor and supplier guide the medical side.

Clean Power for Sensitive Gear

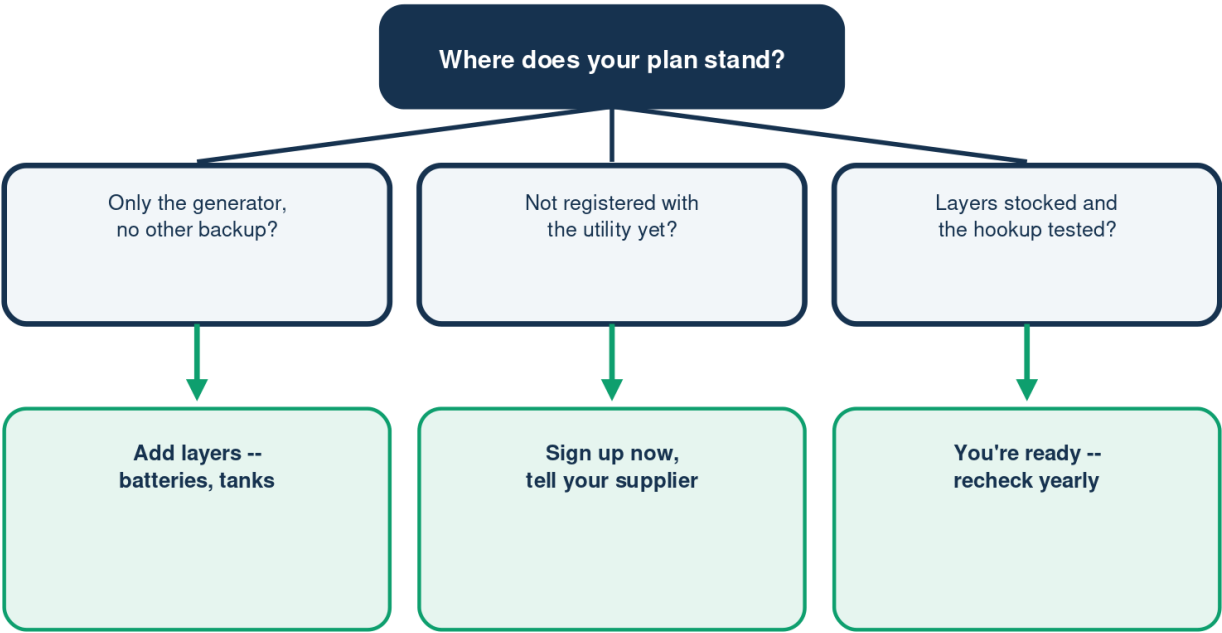
Steady power your devices can trust

	Option	Good for
Cleanest	Inverter generator	Sensitive devices
No-gap	Any gen plus a UPS	Bridging the switch
Fume-free	Battery station	Short, quiet needs
Baseline	Normal wall power	When the grid is on

Always follow the device maker's guidance on what it can be plugged into.

Is Your Medical Backup Plan Ready?

A few honest questions



A generator is one layer -- never the whole plan. Ask your doctor and supplier.

Illustration - a schematic, not to scale. Your setup may differ.



Need a Real Person?

You do not have to remember all of it.
You just have to remember you can call.
Friendly, in-home tech help -- I come to you.

BILL'S PROMISE

If you are not 100% happy with a visit, I will
make it right -- or refund it. No awkwardness,
no fine print. That is how I would want to be treated.

(330) 200-8042 · BillsHomeTech.com

Bill@BillsHomeTech.com · Mon–Sat 9:00 AM – 7:30 PM

— Bill

Prefer help without a visit?

Bill can screen-share and fix many things remotely — a flat \$49, free for Support Plan members.



A Note From Bill

A quick note from Bill.

I write these guides to make home tech a little less frustrating, and I do my best to keep every step accurate and up to date. Still, every home, device, and setup is a bit different, so I can't promise a guide will match yours exactly or fix your particular problem. These guides are for general information only — they're not professional, legal, or financial advice, and they don't replace your device's own manual or the manufacturer's instructions. Please go slow, use your own good judgment, and use everything here at your own risk. If a step involves electrical wiring, a gas appliance, a water heater, plumbing, or climbing a ladder — or if anything just doesn't feel safe — please stop and call a licensed professional (or give me a call at 330-200-8042). Bill's Home Tech and Bill Davis can't be responsible for any damage, data loss, or injury that comes from using these guides. Thanks for reading, and stay safe out there.

— *Bill*



Book a visit —
billshometech.com/book

Use of these guides is subject to our Terms of Use (billshometech.com/terms-of-use).

(330) 200-8042 · BillsHomeTech.com

Bill@BillsHomeTech.com · Mon–Sat 9:00 AM – 7:30 PM

For general information only — not professional advice. Use at your own risk. For electrical, gas, water, or ladder work, please call a licensed professional. — Bill's Home Tech