BILL'S HOME TECH
Home & Small Business Tech Solutions

BILL'S COMPLETE MANUALS

Home Office Setup

Desk, chair, monitor, dock, webcam, lighting and Wi-Fi — explained in plain English, one step at a time

A plain-English guide for working, volunteering and learning from home

Take your time — you can't break it

Written for you by Bill — Bill's Home Tech

(330) 200-8042 · BillsHomeTech.com

For Windows 11 PCs, Macs, Zoom, Teams & Google Meet · facts current November 2026

What's Inside

This is your guide to setting up a comfortable, dependable place to work from home — whether that's a full-time job, a part-time business, volunteering, classes, or simply paying the bills and keeping up with family on video calls. Read it in any order and at your own pace. Every piece of equipment comes with what it actually does *for you*, and slow, step-by-step directions. Brands and models change often, so this guide teaches you what to look for on any box, rather than telling you which one to buy.

Part 1 — Getting Started

1 A Note from Bill
2 What a Good Home Office Really Needs
3 Picking the Right Spot

Part 2 — Your Desk, Chair & Screen

4 Setting Up Your Chair and Desk
5 Where the Screen Goes
6 Keyboard, Mouse and Laptop Stands
7 Giving Your Eyes and Body a Break

Part 3 — Monitors

8 Choosing a Monitor
9 Cables and Ports: HDMI, DisplayPort and USB-C
10 Connecting a Monitor to a Windows 11 PC
11 Connecting a Monitor to a Mac
12 When the Monitor Won't Cooperate

Part 4 — Docks & USB-C Hubs

13 Docks and USB-C Hubs Explained
14 Choosing and Setting Up a Dock

Part 5 — Looking & Sounding Good on Video

15 Webcams: Built-In, Plug-In or Your iPhone
16 Microphones, Headsets and Speakers
17 Lighting for Video Calls
18 Camera and Microphone Settings in Zoom
19 Settings in Microsoft Teams and Google Meet

Part 6 — A Steady Internet Connection

20 Wi-Fi or a Cable? Getting a Steady Connection
21 Fixing Weak Wi-Fi at Your Desk

Part 7 — Power, Paper & Cables

22 Printers and Scanners

23 Surge Protectors and Battery Backups

24 Taming the Cables

Part 8 — Privacy & Safety

25 Keeping Work and Home Private and Secure

26 Scams Aimed at People Who Work from Home

Part 9 — When to Call Bill & Your Cheat-Sheet

27 When to Call Bill

28 Your Home Office Cheat-Sheet

PART 1

Getting Started

What a good home office really needs, and how to pick the right spot in your house. Start here.

CHAPTER 1

A Note from Bill

Hello, and welcome. More and more of life happens at a desk at home: a job, a small business, volunteer work, an online class, doctor visits by video, paying bills, and keeping up with the grandchildren on a video call. If your "office" is a laptop on the kitchen table, a corner of the spare bedroom, or a desk that has collected a tangle of cables over the years, this guide is for **you**.

I'm Bill. I've spent more than 30 years working with technology, and these days I help folks here in Portage County feel at home with theirs. I wrote this guide the way I'd explain it sitting beside you at your desk: patiently, in plain English, and without trying to sell you anything. When I use a word like "dock" or "Ethernet," I'll stop and explain it right then.

What this guide will do for you

- Help you set up your chair, desk and screen so your neck, back and eyes feel better at the end of the day.
- Show you how to choose a monitor and connect it to a Windows 11 PC or a Mac — including which cable you need.
- Explain docks and USB-C hubs, so one cable can connect your laptop to everything on the desk.
- Help you look and sound good on Zoom, Microsoft Teams and Google Meet, with simple fixes for light, camera and microphone.
- Get you a steady internet connection where you actually sit.
- Protect your equipment from power problems, tame the cables, and keep your work and your family's information private.

The big promise: you can't break anything by reading

Almost everything in here is about *arranging*, *plugging in* and *changing a setting* — things you can do slowly and undo if you change your mind. Move the monitor, try it, move it back. Pick a different camera in Zoom, see how it looks, switch again. Nothing here will hurt your computer.

WHAT THIS DOES FOR YOU

Why this matters

A few small changes — raising a screen, moving a lamp, plugging in one cable — can mean fewer headaches, a clearer picture on video calls, and less time fighting your equipment. That's more energy left for the work itself, and for the rest of your day.

GOOD TO KNOW

Working for an employer?

If your job gave you a computer, your company's IT department may control some settings and may have rules about what you plug into it. Check with them before adding a dock or changing security settings on a work laptop. Everything in this guide works the same way on your own computer.

And I'm only a phone call away

If anything in this guide leaves you unsure, call me at **(330) 200-8042**. There's no such thing as a silly question.

Let's start with the short list of what a good home office really needs.

— Bill

CHAPTER 2

What a Good Home Office Really Needs

Stores and websites will happily sell you a whole room of gadgets. You don't need most of them. Here's the honest short list, roughly in order of how much difference each one makes.

The essentials

1. **A chair that supports your back** and adjusts to your height. You'll sit in it for hours, so it matters more than almost anything else on this list.
2. **A work surface at the right height** — a desk or table where your arms can rest comfortably.
3. **A screen at the right height and distance.** For a laptop, that usually means a separate monitor or a laptop stand with a separate keyboard and mouse.
4. **Good light** on your work and on your face, without glare on the screen.
5. **A dependable internet connection** where you sit.
6. **A surge protector** for the computer, monitor and internet equipment.

Nice to have

- A **dock** or **USB-C hub**, so a laptop connects to everything with one cable (Chapter 13).
- A **webcam** and a **headset** if you're on video calls often (Chapters 15 and 16).
- A **battery backup** to ride out short power blinks (Chapter 23).
- A **printer and scanner**, if your work still involves paper (Chapter 22).
- A few **cable ties** and a small tray under the desk to keep cords tidy (Chapter 24).

TIP

Use what you have first

Before you buy anything, try rearranging what you already own. A stack of sturdy books under a monitor, a lamp moved to the other side of the desk, or a folded towel behind your lower back can tell you what helps before you spend a dollar.

GOOD TO KNOW

A laptop alone is hard on your neck

A laptop's screen and keyboard are attached, so you can't put both in the right place at once. If the keyboard is at a comfortable height, the screen is too low and you look down all day. That's why a separate keyboard and mouse, plus a monitor or a laptop stand, is so often the first upgrade worth making. Chapter 6 explains the options.

CHAPTER 3

Picking the Right Spot

Where you put your desk affects your comfort, your video calls and your internet connection. If you have a choice of rooms or corners, walk through this checklist before you move any furniture.

Things to check in the room

Check	Why it matters
Outlets nearby	You'll want the computer, monitor, lamp and chargers on one surge protector, without an extension cord across the floor.
Wi-Fi signal (or a cable jack)	Sit in the spot with your laptop or phone and run a speed test. A weak signal here means choppy video calls (Chapter 20).
Windows	Daylight is lovely, but a bright window *behind* your screen or *behind you* causes glare and dark video. Beside you is best.
Noise	A door you can close helps on calls. Hard floors and bare walls echo; a rug and curtains soften sound.
Temperature	Computers and people both dislike a hot, stuffy corner. Avoid a spot right over a heat register.
What's behind you	This is what people see on video. A plain wall or tidy bookshelf works well.

Where the desk faces

The simplest rule: put the desk so the main window is **to your side**, not in front of you and not behind you. Light from the side lets you see the screen without glare and lights your face evenly on camera. Chapter 17 goes into lighting in more detail.

TIP

Test a spot before you commit

Set a laptop on a card table in the spot you're considering. Join a free test meeting (Zoom offers one at **zoom.us/test**) and look at yourself on camera, check the Wi-Fi speed, and listen for echo. Ten minutes of testing beats moving a desk twice.

STAY SAFE

Keep cords out of walkways

A cord across a walkway is a tripping hazard, especially for anyone who uses a cane or walker or gets up at night. If you must cross a path, use a flat cord cover made for floors — and never run a cord under a rug, where it can wear through and overheat unseen.

PART 2

Your Desk, Chair & Screen

Setting things up so your body is comfortable: chair, desk height, where the screen goes, keyboard and mouse, and giving your eyes a rest.

CHAPTER 4

Setting Up Your Chair and Desk

The U.S. Occupational Safety and Health Administration (OSHA) publishes a free online guide called the **Computer Workstations eTool**. It isn't a law for your home — OSHA itself says its eTools are advice, not requirements — but it's a clear, sensible description of a comfortable way to sit. This chapter follows it.

The comfortable sitting position

OSHA describes a "neutral" body position: one where your joints are naturally lined up and nothing is bent or twisted for long. In plain terms:

- **Feet** flat on the floor — or on a footrest if your desk can't go lower.
- **Knees** about level with your hips, feet slightly forward.
- **Back** supported by the chair, upright or leaning back slightly, with support for the curve of your lower back (the "lumbar" area).
- **Shoulders** relaxed, not hunched up toward your ears.
- **Elbows** close to your body and bent at roughly a right angle or a little more open.
- **Wrists and hands** straight, in line with your forearms — not bent up, down or sideways.
- **Head** level or tilted slightly down, facing forward, not craned toward the screen.

Adjusting your chair, step by step

1. Stand in front of the chair. Raise or lower the seat until the front edge is just below your kneecap.
2. Sit all the way back. Your feet should rest flat on the floor with your thighs roughly level. If your feet dangle, the seat is too high — or you need a footrest.
3. Check the front edge of the seat. You should be able to fit a few fingers between it and the back of your knee, so it doesn't press there.
4. Adjust the backrest so it fits the small of your back. If your chair has no lumbar support, OSHA suggests a rolled-up towel or a removable back cushion as a simple fix.
5. If the chair has armrests, set them so your shoulders relax and your elbows stay close to your body. OSHA says armrests should be soft. If they bump the desk and keep you from pulling in close, lower them or take them off.

Desk height

With your chair set, rest your hands on the keyboard. Your elbows should be at about the height of the keyboard, with your shoulders relaxed. If the desk is too high, you'll find yourself shrugging; if it's too low, you'll hunch forward.

- **Desk too high?** Raise the chair and add a footrest, or use a keyboard tray that slides out below the desktop.
- **Desk too low?** Sturdy furniture risers can lift a desk or table. Make sure it stays steady.
- **Leg room:** keep the space under the desk clear of boxes and the computer tower, so you can pull in close without twisting.

GOOD TO KNOW

About standing desks

Sit-stand desks let you change position during the day. They can be pleasant, but standing all day isn't the goal — changing position often is. If you buy one, check its weight limit for your monitor and make sure cords have enough slack to rise with the desk.

HEADS UP

Pain that doesn't go away is a doctor's question

This guide is about comfortable equipment, not medical care. If you have ongoing pain, numbness or tingling in your hands, wrists, neck or back, talk with your doctor or a physical or occupational therapist. They can recommend a setup that fits your body.

CHAPTER 5

Where the Screen Goes

Most neck and eye complaints at a desk come down to a screen that's too low, too close, too far, or facing a window. OSHA's guidance makes this simple.

Distance: about an arm's length

OSHA says the preferred viewing distance is generally between **20 and 40 inches** from your eyes to the front of the screen. A quick check: sit back in your chair and stretch out your arm. Your fingertips should come close to the screen. If text is hard to read at that distance, make the text bigger (Chapters 10 and 11 show how) rather than pulling the screen closer. OSHA notes text may need to be larger on smaller monitors.

Height: top of the screen at or below eye level

OSHA says the top line of the screen should be at or below eye level, so you look slightly down at the middle of the screen — about 15 to 20 degrees below straight ahead. In practice:

1. Sit comfortably, looking straight ahead.
2. Notice where your eyes land on the screen. They should be at or a little below the top edge.
3. If you're looking up, lower the monitor (or raise your chair and add a footrest).
4. If you're looking well down, raise the monitor with its stand, a monitor riser, or a sturdy book.

TIP

Bifocals and progressive lenses

If you wear bifocals, trifocals or progressives, you probably tip your head back to read through the bottom of your lenses. Put the monitor **lower** than usual, and tilt it back slightly, so you can read it without lifting your chin. Some people find a pair of single-vision "computer glasses" from their eye doctor much more comfortable.

Straight ahead, and away from glare

- Put the screen **directly in front of you**, lined up with the keyboard, so you aren't twisting your neck.
- With **two monitors** used equally, place them side by side with the seam in front of your nose. If you use one more than the other, put the main one in front and the second one off to the side.
- Keep the screen at a right angle to windows when you can, so daylight isn't reflecting off it or shining in your eyes from behind it.
- Tilt the screen slightly to get rid of reflections from overhead lights.

WHAT THIS DOES FOR YOU

What this does for you

A screen at the right height and distance lets your head rest in a natural position instead of leaning forward. Many people find their neck and shoulders feel noticeably better within a few days.

CHAPTER 6

Keyboard, Mouse and Laptop Stands

Your keyboard and mouse are where your hands spend the day. Getting them in the right place is quick and inexpensive.

Placing the keyboard and mouse

- Put the keyboard right in front of you, close enough that your elbows stay near your sides.
- Keep the mouse right beside the keyboard, at the same height, so you don't reach out to the side.
- Keep wrists straight. If the keyboard has little legs that tilt it up at the back, try it with the legs folded — many people find a flat keyboard keeps their wrists straighter.
- A palm rest is for resting *between* typing, not for leaning on while you type.

GOOD TO KNOW

Split and ergonomic keyboards

OSHA notes that split keyboard designs can help you keep your wrists in a neutral position. Vertical mice, trackballs and large touchpads are other options. Try one in a store if you can; what feels right varies a lot from person to person.

Wired or wireless?

Type	Good to know
Wired (USB)	Plug in and it works. Never needs batteries. A cord on the desk.
Wireless with a USB receiver	A tiny plug ("dongle") goes in the computer. Very reliable. Needs batteries or charging.
Bluetooth	No plug needed — it pairs with the computer. Handy for laptops with few ports. Can occasionally need re-pairing.

Setting up a laptop for all-day use

You have two good choices:

1. **Laptop plus a monitor.** Leave the laptop open beside the monitor (as a second screen) or closed. Use a separate keyboard and mouse. This is the most comfortable setup for long days.

2. **Laptop on a stand.** A stand raises the laptop's screen to eye level. Because the keyboard goes up with it, you'll need a separate keyboard and mouse on the desk.

TIP

Closing the laptop lid

Many laptops can keep running with the lid closed while connected to power and a monitor. On a Windows 11 PC, search the Start menu for **lid**; the lid setting lets you choose "Do nothing" when plugged in. On a Mac laptop, connect power, a display and a keyboard or mouse, then close the lid. Check your model's details, and remember your laptop's own camera and microphone are covered when it's closed.

CHAPTER 7

Giving Your Eyes and Body a Break

Even a perfect setup isn't meant to be used without moving for hours. Small breaks keep your eyes and body comfortable.

The 20-20-20 habit

A tip eye-care professionals often share, including the American Optometric Association, is the **20-20-20 rule**: every **20 minutes**, look at something about **20 feet** away for **20 seconds**. It gives the focusing muscles in your eyes a rest. Researchers note there's limited formal study of the rule itself, but it's an easy, harmless habit.

Other easy habits

- **Blink.** People blink less while staring at a screen, which can dry the eyes.
- **Stand up and move** every half hour or so — refill your water, look out a window, walk to the mailbox.
- **Change position.** Shift in your chair, stand for a phone call, stretch your shoulders.
- **Keep your glasses prescription current.** Tell your eye doctor how far away your screen is.

TIP

Let the computer remind you

You can set a repeating timer on your phone, or ask a smart speaker to remind you every hour. On a Windows 11 PC, Focus sessions in the Clock app can time a work stretch and then tell you to take a break — the "Ways Your Home Office Can Make Life Easier" topic shows how.

HEADS UP

Eye strain signs

Digital eye strain can show up as headaches, blurry vision, dry eyes, or neck and shoulder aches. If they don't ease up with better setup and breaks, see your eye doctor.

PART 3

Monitors

Choosing a monitor, knowing which cable you need, connecting it to a Windows 11 PC or a Mac, and fixing the most common problems.

CHAPTER 8

Choosing a Monitor

A **monitor** is simply a separate screen for your computer. Adding one — or a second one — is often the single most helpful upgrade for a home office. Here's what the words on the box mean.

Size

Size (measured corner to corner)	Good for
22 to 24 inches	Most desks. Comfortable for email, documents and video calls. Fits two side by side on a normal desk.
27 inches	More room for side-by-side windows. Great if you sit a bit farther back or like larger text.
32 inches and up	Very roomy. Needs a deep desk so it isn't too close to your eyes.

Resolution: how sharp it is

Resolution is how many tiny dots (pixels) make up the picture. More dots means sharper text — but on a smaller screen, very high resolutions make everything look tiny unless you turn up the scaling (Chapter 10 and Chapter 11 show how).

- **1080p** (also called Full HD, 1920 x 1080): fine on 22–24 inch screens.
- **1440p** (QHD, 2560 x 1440): a nice step up on 27-inch screens.
- **4K** (UHD, 3840 x 2160): very sharp; usually used with scaling so text stays a comfortable size.

Features worth looking for

- **A height-adjustable stand**, so you can set the top of the screen at eye level (Chapter 5). Many budget monitors only tilt. A **VESA mount** (four screw holes on the back) lets you use an adjustable arm instead.
- **The right inputs** for your computer — HDMI, DisplayPort or USB-C (Chapter 9).
- **USB-C with charging** (sometimes called "Power Delivery" or "PD"): one cable carries the picture *and* charges your laptop.
- **A matte (non-glossy) screen** to cut reflections.

- **Built-in speakers** are handy but usually thin-sounding. A headset or small speakers sound better.

TIP

Bigger isn't always easier on the eyes

If you want larger text, a bigger screen at a normal resolution (for example, 27 inches at 1440p, or 24 inches at 1080p) often reads more comfortably than a small, very sharp screen. You can also enlarge text on any screen in the display settings.

GOOD TO KNOW

Costs

Basic 24-inch monitors are often among the least expensive upgrades for a desk, and prices vary a great deal by size and features. Height-adjustable stands and USB-C charging usually cost more. Compare the features above rather than the brand name.

CHAPTER 9

Cables and Ports: HDMI, DisplayPort and USB-C

A **port** is a socket on your computer or monitor. To connect a monitor, you need a cable whose ends match a video port on the computer and an input on the monitor. Take a look at both before you shop.

The three video connections you'll see

Connection	What it looks like	Good to know
HDMI	A flat, wide plug with slanted corners — the same one TVs use.	The most common. Any certified HDMI cable works for an office monitor.
DisplayPort	Like HDMI but with one corner cut off square.	Common on desktop PCs and monitors. Often found on business laptops as Mini DisplayPort.
USB-C	A small oval plug that goes in either way up.	Can carry video, data and power — but **not every USB-C port carries video**. See below.

USB-C: same shape, different abilities

USB-C is the confusing one. The plug is always the same shape, but what a port can *do* depends on the hardware inside it. For video, a USB-C port has to support a feature called **DisplayPort Alternate Mode** (often written "DP Alt Mode"), or be a **Thunderbolt** or **USB4** port.

- A small **lightning-bolt** symbol next to the port means Thunderbolt. Those ports carry video.
- A small **D**-shaped DisplayPort symbol next to the port means it supports video.
- Many ports have no symbol at all. Check your computer's specifications page (search for your model number plus "specs") for words like "DisplayPort," "video out," "Thunderbolt" or "USB4."
- The **cable** must support video too. A cheap charging cable may charge your laptop but show no picture. Look for "video," "DisplayPort Alt Mode," "USB4" or "Thunderbolt" on the package.

GOOD TO KNOW

Macs with USB-C

Apple's current MacBook Air models use Thunderbolt (USB-C) ports that support DisplayPort video. Apple lists on each Mac's Tech Specs page how many external displays it supports — and it varies. For example, Apple says MacBook Air models with M4 or M5 chips support up to two external displays in addition to the built-in screen, while the M2 model officially supports one. Check your model before buying a second monitor.

Adapters

If the ends don't match — say your laptop has only USB-C and your monitor has only HDMI — a simple **USB-C to HDMI adapter or cable** solves it, as long as the laptop's USB-C port carries video. Older monitors may have **VGA** (a blue plug with screws) or **DVI** (a white plug with pins). Adapters exist, but for a very old monitor, a new one is often simpler.

TIP

Bring a photo to the store

Take a close-up picture of the ports on the side or back of your computer and on the monitor. Anyone helping you — store staff, a family member, or me — can tell at a glance which cable you need.

CHAPTER 10

Connecting a Monitor to a Windows 11 PC

Windows 11 usually notices a new monitor on its own within a few seconds. Here's how to connect it and then tell Windows how you want to use it.

Connecting

1. Plug the monitor into a power outlet (ideally your surge protector) and turn it on.
2. Connect the video cable from the monitor to the computer.
3. If the monitor says **No Signal**, use the buttons on the monitor to choose the right input (HDMI 1, HDMI 2, DisplayPort or USB-C) — the one you plugged into.
4. Wait a few seconds. The screen should flicker and show your desktop or wallpaper.

Choosing Duplicate or Extend

Press the **Windows logo key + P** together. A small menu appears with four choices:

Choice	What it does
PC screen only	Uses just the laptop's own screen.
Duplicate	Shows the same thing on both screens. Handy for showing someone a presentation.
Extend	Makes one big desktop across both screens. You can drag windows from one to the other. Best for working.
Second screen only	Uses only the monitor. Good if your laptop is closed or set aside.

Lining up your screens

1. Select **Start** > **Settings** > **System** > **Display**.
2. You'll see a box for each screen, numbered. Select **Identify** — a big number appears on each screen so you know which is which.
3. Drag the boxes so they match where the monitors actually sit on your desk (left, right, above). Then select **Apply**. Now your mouse moves naturally from one screen to the other.
4. To choose which screen holds the taskbar and Start menu, select that screen's box, then check **Make this my main display**.

Making text bigger or smaller

1. In **Settings** > **System** > **Display**, select the screen you want to change.
2. Under **Scale**, choose a larger percentage to make everything bigger, or a smaller one for more room.
3. Leave **Display resolution** at the one marked **(Recommended)** — that keeps the picture sharp.

TIP

When the monitor is unplugged

Under **Settings** > **System** > **Display** > **Multiple displays**, Windows can remember where each window was on each monitor and can minimize windows when a monitor is disconnected, so nothing gets "lost" off-screen. If a monitor is connected but doesn't show up, the same section has a **Detect** button.

CHAPTER 11

Connecting a Monitor to a Mac

A Mac also recognizes a monitor on its own. Most current Macs connect through their USB-C (Thunderbolt) ports, sometimes with an adapter, and some models also have an HDMI port.

Connecting

1. Plug in and turn on the monitor.
2. Connect a video cable from a Thunderbolt/USB-C port (or the HDMI port, if your Mac has one) to the monitor. Apple notes you need a video cable for each display and may need an adapter.
3. If the monitor says No Signal, choose the correct input with the monitor's own buttons.

Arranging, mirroring and choosing the main display

1. Choose **Apple menu** > **System Settings**, then click **Displays** in the sidebar.
2. Click **Arrange**. (This button appears only when an external display is connected.)
3. Drag the screen pictures to match where your monitors sit on the desk, then click **Done**.
4. To make the same picture show on both screens, choose the monitor and set it to **Mirror** the built-in display.
5. To move the menu bar and Dock to the big monitor, set it as the **Main display**. In the Arrange view, you can also drag the little white menu bar from one screen picture to another.

Making text bigger

In **System Settings** > **Displays**, select the monitor. Choose one of the size options from **Larger Text** to **More Space**. Picking a size toward Larger Text keeps things sharp while making them easier to read.

TIP

Monitor not showing up?

Apple suggests holding the **Option** key in Displays settings to reveal a **Detect Displays** button. Also try a different cable or port, and make sure your Mac supports the number of displays you've connected (Chapter 9).

CHAPTER 12

When the Monitor Won't Cooperate

Most monitor trouble is a loose cable, the wrong input, or a setting. Work down this list in order — it fixes the large majority of problems.

"No Signal" or a black screen

1. Check that the monitor is on (look for a small power light).
2. Use the monitor's buttons to choose the input you're plugged into.
3. Unplug the video cable at both ends and push it back in firmly.
4. On Windows, press **Windows logo key + P** and choose **Extend**.
5. Try a different cable, or a different port on the computer. For USB-C, make sure that port carries video (Chapter 9).
6. Restart the computer with the monitor connected.

Other common problems

Problem	Try this
Everything is tiny	Raise the Scale (Windows) or choose a Larger Text size (Mac).
Text looks fuzzy	Set the resolution to the Recommended one (Windows) or the Default size (Mac).
Mouse goes off the wrong edge	Rearrange the screen boxes in display settings to match your desk.
Windows open on the wrong screen	Make the screen you use most your main display.
Monitor flickers	Reseat or replace the cable; try a shorter certified cable.
Monitor sleeps and won't wake	Move the mouse or press a key; check the cable; update the computer.

HEADS UP

Lost a window off the edge?

If a window opened on a monitor that's no longer connected, on Windows click the window's taskbar button, then press **Windows logo key + Shift + Left arrow** to move it to the other screen. Reconnecting the monitor and choosing Extend again also brings it back.

PART 4

Docks & USB-C Hubs

One cable from your laptop to everything on the desk: what docks and hubs do, how to pick one, and how to set it up.

CHAPTER 13

Docks and USB-C Hubs Explained

If you use a laptop at a desk, you probably plug in the same things every morning: the charger, the monitor, a keyboard and mouse, maybe a printer or a wired internet cable. A **dock** (short for "docking station") or a **USB-C hub** gathers all of those into one box, so you connect your laptop with a single cable and everything comes to life at once.

WHAT THIS DOES FOR YOU

What this does for you

Sit down, plug in one cable, and your big screen, full-size keyboard, mouse and charger all connect. Unplug that one cable and take the laptop to the couch. No more fishing behind the desk for the right port, and less wear on the laptop's own connectors.

Hub or dock: what's the difference?

	USB-C hub	Dock
Size	Small, often pocket-sized, with a short attached cable	A larger box that sits on the desk
Power	Usually runs off the laptop; some pass charging through	Has its own power adapter and charges the laptop
Monitors	Usually one	Often two or more (depending on the laptop)
Best for	Travel, or a simple desk with one monitor	A permanent desk you return to every day
Rough cost	About $20 to $80	About $100 to $300 or more

Prices are rough ranges as of November 2026 and vary widely by brand and features. The names get used loosely in stores, so read what each box actually includes rather than trusting the word "dock" or "hub."

Words you'll see on the box

USB-C	The small, oval connector that plugs in either way up. Not every USB-C port does the same things (Chapter 9).
Thunderbolt	A faster kind of USB-C port with a small lightning-bolt symbol next to it. Thunderbolt docks are usually the most capable, and the most expensive.
Power Delivery (PD)	The dock can charge your laptop through the same cable. The box lists a number in watts (W), like 65 W or 100 W.
Upstream or host port	The one port on the dock meant for your laptop. It's often marked with a laptop symbol.
Downstream ports	The ports for your accessories: keyboard, mouse, drives, phone chargers.
HDMI / DisplayPort	Where your monitors plug in.
Ethernet (RJ-45)	A jack for a wired internet cable, which is steadier than Wi-Fi (Chapter 20).
DisplayLink	A technology some docks use to run extra monitors through software. It needs an app installed on the computer (Chapter 14).

GOOD TO KNOW

Your laptop decides more than the dock does

A dock can't give a laptop abilities it doesn't have. If your laptop's USB-C port doesn't carry video, no dock will put a picture on a monitor through it. And the number of monitors you can run is mostly set by the laptop. Check your laptop's specifications page first, then shop for a dock that matches.

Do you even need one?

- **Desktop computer:** no. Everything already plugs into the back of the tower.
- **Laptop with one monitor, and you rarely unplug:** a simple hub, or just a monitor cable plus your charger, may be all you need.
- **Laptop you take away from the desk every day:** a dock pays for itself in convenience.
- **Some USB-C monitors act like a dock**: one cable carries video, charges the laptop and connects the monitor's own USB ports. If you're buying a new monitor anyway, this can save buying a dock.

TIP

Write down what you plug in

Before shopping, list every cable you connect to your laptop at the desk. Count the monitors, USB devices and whether you use a wired internet cable. Then look for a hub or dock with at least that many of each kind of port, plus one spare.

CHAPTER 14

Choosing and Setting Up a Dock

Most dock trouble comes from a mismatch: the wrong kind of port, too little charging power, or more monitors than the laptop can drive. A few minutes of checking before you buy avoids all three.

Before you buy: four questions

1. **What port does my laptop have?** Look at the symbols next to its USB-C ports. A lightning bolt means Thunderbolt; a small "D" shape means DisplayPort video. If there's no symbol, check the maker's specifications page for your exact model.
2. **How many watts does my laptop's charger provide?** It's printed on the charger. Pick a dock whose Power Delivery rating is the same or higher. A dock rated lower may charge slowly, or show a warning that the charger is too weak.
3. **How many monitors can my laptop run?** On a Mac, check Apple's Tech Specs page for your model (Chapter 9). On a Windows laptop, check the maker's specifications.
4. **What kinds of monitor jacks do I need?** Match the dock's HDMI or DisplayPort jacks to your monitors, so you don't need adapters.

Setting it up

1. Place the dock where its cable reaches your laptop comfortably without stretching.
2. Plug the dock's own power adapter into your surge protector (Chapter 23), then into the dock.
3. Connect the monitors, keyboard, mouse and any wired internet cable to the dock.
4. Plug the dock's laptop cable into your laptop's USB-C or Thunderbolt port — the one that carries video and charging. On the dock end, it goes in the **upstream** or **host** port.
5. Wait a moment. The monitors should light up and the laptop should show that it's charging.
6. Arrange your screens the way Chapter 10 (Windows) or Chapter 11 (Mac) explains.

HEADS UP

Use the cable that came with the dock

Not all USB-C cables are alike. Some carry only charging or slow data, not video. A USB-C-to-USB-A cable can't charge a laptop at all. The cable packed with the dock is the right one; if you replace it, buy one rated for the same speed and wattage.

DisplayLink docks and Macs

Some Macs, especially many MacBook Air models, can only run one or two external monitors on their own. Docks that use **DisplayLink** get around this with software. They work, but there are a few things to know:

- You must install the free **DisplayLink Manager** app on the Mac, and it has to be running for the extra monitors to work.
- The Mac asks you to allow **Screen Recording** for DisplayLink Manager. That's how the app sends the picture to the dock, and it's expected.
- DisplayLink screens are fine for documents, email and web pages, but may not be smooth for fast video.
- Newer Macs support more monitors on their own, so check your model before buying a DisplayLink dock.

SCAM ALERT

Download drivers only from the maker

If a dock needs an app or driver, get it from the dock maker's own website or the link in its manual — never from a pop-up ad or a site that turns up in a search with a slightly misspelled name. Fake "driver" downloads are a common way to slip harmful software onto a computer.

When the dock acts up

Problem	Try this
Laptop isn't charging	Make sure the cable is in the upstream (laptop) port on the dock, and the dock's power adapter is plugged in.
Monitors stay black	Unplug the laptop cable, wait 10 seconds and plug it back in. Then press Windows logo key + P and choose Extend (Windows).
Only one of two monitors works	Your laptop may only support one external display through that port. Check its specifications.
Keyboard or mouse stops responding	Unplug the dock's power for 30 seconds, then plug it back in.
Works on one laptop, not another	Check the maker's website for a dock firmware or driver update, and update the laptop.

PART 5

Looking & Sounding Good on Video

Webcams, microphones and headsets, lighting, and the camera and sound settings in Zoom, Microsoft Teams and Google Meet.

CHAPTER 15

Webcams: Built-In, Plug-In or Your iPhone

Most laptops have a camera built into the top of the screen. It works, but it's often small, and it sits wherever the laptop sits — which, if you've raised your laptop or added a monitor, may not be in front of your face. You have three choices.

Option	Good for	Keep in mind
The laptop's built-in camera	Occasional calls; travel	Raise the laptop so the camera is at eye level.
A plug-in USB webcam	Regular calls with a separate monitor	Clips on top of the monitor; usually about $30 to $150 as of November 2026.
Your iPhone (Mac only)	A sharp picture without buying anything	Needs a stand or mount to hold the phone above the screen.

WHAT THIS DOES FOR YOU

What this does for you

A camera at eye level, looking straight at you, makes video calls feel more like sitting across the table. Family, doctors and coworkers see your face instead of the ceiling or your chin.

Setting up a plug-in webcam

1. Open the clip on the back of the webcam and hang it over the top edge of your monitor, centered.
2. Plug its cable into a USB port on the computer or your dock (Chapter 13).
3. Wait a few seconds. Windows and Macs recognize most webcams on their own without any installation.
4. In your video-call app, choose the new camera (Chapters 18 and 19). The app may keep using the built-in camera until you change it.
5. Tilt the webcam so your eyes are about a third of the way down from the top of the picture.

TIP

Look at the camera, not the faces

When you talk, glance at the camera now and then. It feels odd at first, but to the people on the other end it looks like you're making eye contact. Placing the call window near the top of the screen, just under the camera, helps too.

Using your iPhone as a webcam on a Mac

Apple calls this **Continuity Camera**. Your iPhone's camera is far better than most webcams, and your Mac can use it in Zoom, Teams, FaceTime and other apps.

What you need

- An iPhone with iOS 16 or later, and a Mac with macOS Ventura 13 or later.
- Both signed in to the **same Apple Account**, with two-factor authentication turned on.
- Wi-Fi and Bluetooth turned on for both — or connect the iPhone to the Mac with a USB cable.
- A stand or mount that holds the iPhone steady, in landscape (sideways), with its back cameras facing you.

How to use it

1. Put the iPhone in its mount on top of or just in front of your monitor, screen facing away from you.
2. Open your video-call app on the Mac.
3. In the app's camera menu, choose your iPhone. Many apps switch to it automatically.
4. When you're done, take the iPhone off the mount or end the call; it goes back to being a phone.

GOOD TO KNOW

Some extras need newer versions

Features like reactions, manual framing and background replacement need newer versions of macOS and, for some, a newer iPhone. The basic webcam works with the versions listed above.

Checking the camera in Windows 11

Windows 11 has a camera settings page that lets you preview your camera and adjust brightness.

1. Open **Settings** > **Bluetooth & devices** > **Cameras**.
2. Select your camera from the list. You'll see a live preview.
3. Adjust **Brightness** or **Contrast** if your camera offers them. Changes take effect right away.
4. On some newer PCs, you'll also see **Windows Studio Effects**, such as background blur. These appear only on select computers that have a special AI chip (called an NPU).

CHAPTER 16

Microphones, Headsets and Speakers

On a video call, people forgive a so-so picture much more easily than poor sound. If others ask you to repeat yourself, or hear an echo of their own voice, the fix is usually about your microphone and speakers, not your internet.

Your three choices

Choice	Pros	Cons
Built-in microphone and speakers	Nothing to buy	Picks up room echo and noise; others may hear themselves echo back.
A headset (headphones with a microphone)	Clearest sound; no echo; others in the house aren't disturbed	Something on your head; wired or Bluetooth to keep charged.
A USB desk microphone or speakerphone	Natural sound with nothing on your head	Costs more; still picks up some room sound.

WHAT THIS DOES FOR YOU

What this does for you

A simple headset lets you hear every word clearly — helpful if your hearing isn't what it was — and lets everyone else hear you without echo or the TV in the next room.

Wired or wireless?

- **Wired USB headsets** just work: plug in, pick them in your app, done. Nothing to charge.
- **Bluetooth headsets and earbuds** are freer, but need charging and pairing. On some computers, using the Bluetooth microphone lowers the sound quality you hear. If calls sound muffled, try a wired headset.
- **Hearing aids** that stream from a phone may also connect to a computer. Ask your audiologist which computers your model supports.

Choosing the right one on your computer

1. Plug in or connect the headset.
2. On Windows 11: click the speaker icon at the bottom right of the screen, then the arrow next to the volume slider, and pick your headset. On a Mac: open **System Settings** > **Sound** and choose it under **Output** and **Input**.

3. Also pick it inside your video-call app (Chapters 18 and 19), since apps can remember their own choice.

TIP

Stop the echo

If people hear their own voice coming back, your microphone is picking up your speakers. Use a headset, turn your speaker volume down, or move the microphone away from the speakers.

TIP

Mute when you're not talking

In a group call, staying muted until it's your turn keeps out the dog, the dishwasher and the doorbell. Every app shows a microphone button; a line through it means you're muted.

CHAPTER 17

Lighting for Video Calls

You don't need studio lights to look good on camera. You need light **in front of you**, soft rather than harsh, and not much bright light **behind** you.

The three rules

1. **Face the light.** A window in front of you, or a lamp just behind your screen, lights your face evenly.
2. **Don't sit with your back to a window.** The camera adjusts to the bright window, and you become a dark silhouette.
3. **Soft harsh light.** A bare bulb right overhead makes shadows under your eyes. A lampshade, or light bounced off a wall, is kinder.

WHAT THIS DOES FOR YOU

What this does for you

Good light lets people see your expressions, which makes conversation easier — especially for anyone who relies a little on lip-reading. It also helps the camera make a sharper picture.

Simple fixes, cheapest first

Fix	Cost
Turn the desk so the window is in front of you or to your side (Chapter 3)	Free
Move a table lamp behind your monitor, shining toward you	Free
Close a blind on a window behind you during calls	Free
Use your app's low-light setting (Chapter 18)	Free
Add a small clip-on or ring light with a brightness control	About $20 to $60 (as of November 2026)

TIP

Warm or cool light

Many inexpensive video lights let you choose warmer (yellow) or cooler (blue-white) light. A setting in the middle usually looks most natural. Start dim and turn it up just until your face looks clear.

GOOD TO KNOW

Lighting your desk for work

For reading and paperwork, a desk lamp placed to the side — opposite your writing hand — avoids glare on the screen and shadows on your page. Keep the screen's brightness close to the room's brightness; a glowing screen in a dark room tires the eyes (Chapter 7).

CHAPTER 18

Camera and Microphone Settings in Zoom

Zoom remembers which camera, microphone and speaker you used last. When you add a webcam or headset, you'll usually need to tell Zoom once. Here's where everything lives in the Zoom app on a Windows PC or a Mac.

Test before the real call

1. In your web browser, go to **zoom.us/test** and click **Join**.
2. Zoom plays a ringtone. If you hear it, your speaker or headset works. If not, pick a different speaker from the list.
3. Speak for a moment. Zoom plays your voice back so you can hear how you sound.
4. Look at your video preview and adjust your camera and lighting.

Choosing your camera, microphone and speaker

1. Open the Zoom app and click your profile picture, then **Settings**.
2. Click **Video & effects** and choose your webcam (or iPhone) from the **Camera** list.
3. Click **Audio** and choose your headset under **Speaker** and **Microphone**.
4. During a call, you can also click the small arrow next to the **Video** or **Audio** button at the bottom of the window to switch on the spot.

Settings that make you look and sound better

Adjust for low light	In **Video & effects**. Brightens a dim picture. **Auto** works well for most people.
Touch up my appearance	In **Video & effects**. A gentle softening of the picture, with a slider.
Blur my background	In **Video & effects** > **Backgrounds**. Hides the room behind you. Appears only on computers powerful enough for it.
Noise removal	In **Audio**. Filters out fans, typing and the dog. On by default.

GOOD TO KNOW

No Blur option?

Zoom shows **Blur** only when your computer's processor can handle it. Updating Zoom sometimes helps; on older computers, a tidy wall behind you does the same job for free.

WHAT THIS DOES FOR YOU

What this does for you

Two minutes on these settings once means every call after that starts with the right camera and a clear voice, without fiddling while everyone waits.

CHAPTER 19

Settings in Microsoft Teams and Google Meet

If your job, church group or doctor's office uses Microsoft Teams or Google Meet instead of Zoom, the ideas are the same: pick the right devices once, preview yourself, and blur the background if you like.

Microsoft Teams

1. In Teams, click **Settings and more** (the three dots near your picture), then **Settings**.
2. Click **Devices**. Choose your headset under the speaker and microphone lists, and your webcam under **Camera**.
3. Before joining a meeting, Teams shows a preview screen. Use the camera and microphone switches there, and choose **Background filters** or **Effects** to blur the room behind you.

> **TIP**
> **Camera works in Zoom but not in Teams?**
> Open Windows **Settings** > **Privacy & security** > **Camera** and make sure **Let apps access your camera** is on. Also close any other app that might be using the camera. If you're using Teams in a web browser, the browser has to allow the camera too.

Google Meet

Google Meet runs in your web browser, so there's nothing to install on a computer. The screen you see just before you join is your chance to check everything.

1. Open the meeting link. Before clicking **Join now**, look at your video preview.
2. Click **Check your audio and video** (if you see it) to record a short test and see whether your microphone is muted, noisy or working well. It also shows how good your connection is.
3. Use the microphone and camera menus under the preview to pick your headset and webcam.
4. Click the effects button on your preview to blur your background or choose a background picture.
5. Click **Join now**.

HEADS UP

Allow the camera and microphone

The first time, your browser asks whether Meet may use your camera and microphone. Click **Allow**. If you clicked Block by mistake, click the small icon at the left end of the address bar and switch the camera and microphone back on.

TIP

Same advice for every app

Whatever the app, join a minute or two early. That's time to choose your devices, check your hair and lighting, and fix a problem before anyone is waiting on you.

PART 6

A Steady Internet Connection

Wi-Fi or a cable, testing your connection where you sit, and fixing weak Wi-Fi at the desk.

CHAPTER 20

Wi-Fi or a Cable? Getting a Steady Connection

A frozen face or robot voice on a video call is almost always a connection problem at *your* end of the room, not the internet as a whole. The good news: video calls don't need much speed. They need a **steady** connection.

How much speed you really need

A single video call uses only a few megabits per second (Mbps) in each direction, and apps like Zoom lower the picture quality on their own when the connection struggles. What hurts calls is a weak or jumpy signal, or several people in the house streaming and downloading at the same moment.

GOOD TO KNOW

Upload speed matters for calls

Internet plans advertise the download number. For video calls, the **upload** number matters too — that's your picture and voice going out. Cable and DSL plans often have much lower upload than download. A speed test shows both.

Test where you actually sit

1. Sit at your desk with the computer you'll use.
2. Open a web browser and search for **speed test**. Use the test your internet company offers or a well-known one, and run it.
3. Write down the download and upload numbers.
4. Run it again at a busy time of day (evening, when the family streams TV) and compare.

TIP

Compare with the router

Run the same test standing next to your router. If it's much faster there than at your desk, the problem is the Wi-Fi signal reaching your desk, and Chapter 21 can help. If it's slow everywhere, call your internet company.

Wi-Fi versus a wired (Ethernet) cable

	Wi-Fi	Ethernet cable
Steadiness	Can dip when walls, distance or neighbors interfere	Rock steady
Convenience	No wires	A cable from the router to your desk
Setup	Choose your network and type the password	Plug one end into the router, the other into the computer or dock
Best for	Most homes, most of the time	Desks near the router, or anyone with frequent calls

WHAT THIS DOES FOR YOU

What this does for you

If your desk is in reach of the router, one Ethernet cable can end frozen video calls for good. Long flat cables can run along the baseboard, and many laptops connect through a dock's Ethernet jack (Chapter 13).

STAY SAFE

Run cables safely

Keep network cables along the wall, not across a walkway, and never under a rug where they can be stepped on unseen. Chapter 24 has more on tidy, safe cables.

CHAPTER 21

Fixing Weak Wi-Fi at Your Desk

If the speed test showed a weak signal at your desk, try the free fixes first. Only then consider new equipment. Bill's Home Tech has separate guides on Mesh Wi-Fi and on Wi-Fi Extenders and Dead Zones if you want the full story.

Free fixes, in order

1. **Restart the router.** Unplug it, wait 30 seconds, plug it back in, and give it a few minutes.
2. **Move the router** out of a cabinet or closet and up off the floor, ideally toward the middle of the house.
3. **Move the desk closer,** or at least out from behind a refrigerator, fish tank, mirror or brick fireplace — all of which block Wi-Fi.
4. **Pause the big downloads** during important calls: game updates, cloud backups and 4K streaming in other rooms.

When you need more

Option	How it works	Good to know
Ethernet cable	A cable from router to desk	Cheapest and steadiest, if the distance is manageable.
Mesh Wi-Fi	Several units that work together as one network, with one name and password	Best for whole-house coverage; replaces or works with your router.
Wi-Fi extender	One plug-in unit that repeats the signal	Inexpensive; place it halfway, where the signal is still good.
Powerline adapters	Send internet through your home's electrical wiring	Plug straight into a wall outlet, not a surge strip, or they won't work well.
MoCA adapters	Send internet through the TV coaxial cable already in the walls	Good if there's a TV jack near your desk.

TIP

Ask your internet company first

Many internet companies rent mesh units or extenders that work with the router they gave you. Ask what they offer and what it costs each month before you buy your own.

HEADS UP

Working for an employer?

If your company requires its VPN (a private, protected connection to the office), a weak home signal makes it drop more often. A steady connection fixes most VPN complaints. Your IT department can help if it still disconnects.

PART 7

Power, Paper & Cables

Printers and scanners, protecting your equipment from surges and outages, and taming the tangle under the desk.

CHAPTER 22

Printers and Scanners

Plenty of home offices barely print anymore, but when you need a signed form, a shipping label or a scanned receipt, you need it now. Here's the short version; Bill's Home Tech has full guides to home printers and to the HP, Canon and Epson brands.

Picking the right kind

Kind	Good for	Keep in mind
Inkjet all-in-one	Color, photos, occasional printing, scanning and copying	Ink cartridges can be costly and can dry out if you rarely print.
Ink tank inkjet	Regular color printing	Costs more up front; refilled from bottles, so much cheaper per page.
Laser (black and white)	Lots of letters and forms	Toner doesn't dry out; no color.

Where to put it

- Within easy reach of your chair, so you're not twisting to grab pages.
- On a sturdy surface, not on top of the computer or monitor — printers shake while they work.
- Somewhere the Wi-Fi is decent, if it connects by Wi-Fi. Or connect it with a USB cable if it's beside the computer; that's simpler and steadier.

Scanning without a scanner

Your phone can scan documents well enough for most paperwork. On an iPhone, the **Notes** app can scan documents, and Google Drive on Android has a scan button. On a Mac, Continuity Camera can also scan from your iPhone straight onto the Mac. Save scans as PDF files so they open anywhere.

SCAM ALERT

Fake printer "support" pages

Searching for "printer help" or "printer driver" sometimes turns up look-alike sites and phone numbers that claim your printer is "offline" or "blocked" and ask for remote access or payment. Get software only from the printer maker's own site, typed in yourself (hp.com, canon.com or epson.com, for example), and never let a stranger who called you, or whom you found through an ad, onto your computer.

TIP

Shred and store

A home office collects paper with account numbers on it. A small cross-cut shredder beside the desk makes it easy to deal with as you go.

CHAPTER 23

Surge Protectors and Battery Backups

Your computer, monitor, router and modem don't like sudden jolts of electricity. Most surges are small and come from inside the house — big appliances switching on and off — and they wear electronics down over time. A surge protector absorbs those jolts. A battery backup goes a step further and keeps things running through a short outage.

Surge protector or plain power strip?

They look alike. A real surge protector says **surge protector** (or "surge protective device") on the package and lists a **joule** rating — how much energy it can absorb. A plain power strip only adds outlets and protects nothing.

Lamps, phone chargers	Up to about 1,000 joules
Printers, router, modem, office gear	About 1,000 to 2,000 joules
Computers with important files	2,000 joules or more

Battery backups (UPS)

A battery backup, often called a **UPS** (uninterruptible power supply), is a box with a battery inside. When the power blinks or goes out, it keeps your equipment running for a few minutes — long enough to save your work and shut the computer down properly, or to ride out a flicker without your internet dropping mid-call.

- **What to plug in:** the computer (or laptop dock), monitor, modem and router. Laptops already have a battery, so the modem and router matter most for them.
- **Sizing:** add up the watts of what you'll plug into the battery outlets, then choose a UPS rated about 20 to 30 percent higher in watts.
- **Line-interactive with AVR** on the box means it also smooths out low or high voltage without using the battery — a good choice for home offices.
- **Battery life:** UPS batteries wear out after a few years. A warning light or beeping means it's time to replace the battery, not the whole unit.

HEADS UP

Don't stack them

Don't plug a surge protector or power strip into a battery backup, or a battery backup into a surge protector. Plug each straight into the wall. Stacking can overload them and may void the warranty.

WHAT THIS DOES FOR YOU

What this does for you

When a summer storm makes the lights flicker, your internet and computer keep going, and you don't lose the letter you were typing. Bill's Home Tech has a full guide to Surge Protectors and Battery Backups if you'd like more detail.

CHAPTER 24

Taming the Cables

A tangle of cords under the desk isn't just untidy. It collects dust, makes it hard to tell which plug is which, and can catch a foot or a vacuum cleaner. An hour and a few inexpensive supplies fix it.

What you'll need

- Reusable hook-and-loop (Velcro-style) cable ties.
- A cable tray or basket that screws or clips under the back of the desk, to hold the surge protector and extra cord length off the floor.
- A few adhesive cable clips for the back edge of the desk.
- Small labels, or a marker and masking tape.

Step by step

1. Shut down the computer and turn off the surge protector.
2. Unplug everything and lay out the cables. Toss any you no longer use.
3. Mount the tray under the back of the desk and set the surge protector in it.
4. Plug things back in one at a time. Label each plug near its end ("monitor," "router," "printer").
5. Bundle the extra length of each cord loosely with a cable tie. Don't wrap power cords tightly; that traps heat.
6. Run the cables that go to the desktop up one back leg of the desk, held with clips.
7. Turn everything back on and check that it all works.

> **TIP**
>
> **Leave a little slack**
>
> Leave enough slack in the cables to move the monitor or slide the desk a few inches. Tight cables pull on connectors and loosen them over time.

STAY SAFE

Heat and power safety

Don't plug one power strip into another, don't run cords under rugs, and don't cover a surge protector or a battery backup with papers. Replace any cord that's cracked, frayed, or warm to the touch.

PART 8

Privacy & Safety

Keeping work and family information private at home, and the scams aimed at people who work from home.

CHAPTER 25

Keeping Work and Home Private and Secure

A home office mixes two worlds: your work (or your business) and your household. A few habits keep each one safe from the other — and from strangers.

On camera and microphone

- Check what's behind you before a call: mail, calendars, family photos and whiteboards can all be read on camera. Background blur (Chapters 18 and 19) helps.
- Many webcams and laptops have a **privacy shutter** or a key that turns the camera off. Close it when you're not on a call.
- Mute your microphone when you step away or someone else in the house is talking.
- If others are home, a sign on the door — "On a call" — saves awkward moments.

On the computer

1. **Lock the screen** when you walk away: **Windows logo key + L** on Windows, or **Control + Command + Q** on a Mac.
2. Give each person in the house **their own account** on a shared computer, and keep work files in your account only. Better still, keep a work computer for work only.
3. Keep the computer, browser and apps **updated**. Turn on automatic updates.
4. Use a **strong, unique password** for your Wi-Fi and change the router's own admin password from the one printed on it.
5. Turn on **two-step sign-in** (also called multi-factor or two-factor) for email and any work or business accounts.

> GOOD TO KNOW
>
> **Running a small business from home?**
>
> Bill's Home Tech has a separate guide on Small-Business Cybersecurity, covering backups, staff accounts and more.

SCAM ALERT

"Your computer has a virus" pop-ups

A pop-up or call saying your computer is infected and you must call a number right away is a scam. Microsoft and Apple don't call you or put phone numbers in pop-ups. Close the browser (or restart the computer) and don't call the number.

CHAPTER 26

Scams Aimed at People Who Work from Home

Scammers know that people looking for flexible, at-home work are often eager to say yes. The Federal Trade Commission (FTC) warns about several kinds of fake work-from-home jobs. Knowing the signs makes them easy to spot.

SCAM ALERT

Reshipping "jobs"

If a "job" is to receive packages at home, repackage them and send them somewhere else, it's a reshipping scam. The FTC says reshipping is never a real job. The goods are often bought with stolen credit cards, and you can end up unpaid and in trouble.

SCAM ALERT

The check that's too much

A new "employer" sends you a check — for equipment or your first pay — and asks you to send part of it back, or to buy gift cards. The check is fake. When it bounces days later, the bank takes the money back from you. No real company sends a check and asks you to send money on.

SCAM ALERT

Paying to get the job

Honest employers never ask you to pay for a job — not for training, "starter kits," certification or equipment. Anyone who does is a scammer. Be wary too of ads that promise big money for little work.

If you think you've been caught

1. Stop. Don't send any more money or packages, and stop replying.
2. Call your bank or card company using the number on the back of your card.
3. Report it to the FTC at **ReportFraud.ftc.gov**. For a reshipping scam, also report it to the U.S. Postal Inspection Service at **uspis.gov/report**.
4. If you shared your Social Security number or other personal information, go to **IdentityTheft.gov** for a step-by-step recovery plan.

FROM BILL

You don't have to sort it out alone

If you're not sure whether a job offer, email or call is real, stop and ask before you act. A second pair of eyes is never a bad idea.

PART 9

When to Call Bill & Your Cheat-Sheet

An honest word about when a hand is worth it, and a one-page summary to keep by your desk.

CHAPTER 27

When to Call Bill

Most of what's in this guide you can do yourself, an evening at a time. But part of being helpful is being honest about when a hand saves you time, money and frustration. Here's my straight advice, with no pressure.

Times it's well worth a call

- **Setting up a whole desk at once** — monitor, dock, webcam, headset and printer, all connected and tested together.
- **Choosing equipment** that actually works with your computer, before you spend money on a dock or monitor that doesn't.
- **A second monitor that won't show up**, or screens that keep rearranging themselves.
- **Weak Wi-Fi at your desk** — testing the signal, moving the router, or running a cable or mesh.
- **Getting comfortable on video calls** — a practice call together in Zoom, Teams or Google Meet so the real one goes smoothly.
- **Tidying and protecting the power** — surge protector, battery backup and cables done right.
- **A pop-up, call or job offer you're not sure about** — I'll help you check before you act.

What I don't do

I'm a technology helper, not a furniture store or a doctor. I won't sell you a chair or desk, and if you have pain that doesn't go away, please talk with your doctor or a physical therapist. If your employer supplied your computer, I'll work alongside their IT rules rather than around them.

What working with me is like

I work at your pace, explain what I'm doing in plain words, and never talk down to anyone. I'll tell you honestly when something isn't worth your money. I've been doing this kind of work for more than 30 years, and I serve Portage County, Ohio, in person, and folks farther away by remote help.

FROM BILL

How to reach me

Call **(330) 200-8042** or book a time at **billshometech.com/book**. My help is **$49 remote · $99 in your home**. This guide is yours to keep for free; if you'd like a hand, I'm only a phone call away.

GOOD TO KNOW

You may meet Sophie first

When you call or visit billshometech.com, you might be greeted by **Sophie**, my AI receptionist. She can answer quick questions and help you book a time. A real person — me — does the actual help.

Thank you for taking the time to set up a space that works for you. A comfortable chair, a screen at the right height and a steady connection make every working day a little easier.

— Bill

CHAPTER 28

Your Home Office Cheat-Sheet

Keep just this page by your desk. The whole guide, boiled down.

The essentials

Chair	Feet flat (or on a footrest), knees about level with hips, back supported, shoulders relaxed.
Screen	Top line at or just below eye level, about an arm's length away (20 to 40 inches).
Laptop	Raise it on a stand and use a separate keyboard and mouse, or add a monitor.
Eyes	Every 20 minutes, look about 20 feet away for 20 seconds.
Extend screens (Windows)	Windows logo key + P, then Extend.
Arrange screens (Mac)	System Settings, Displays, Arrange.
Dock	Laptop goes in the upstream (host) port; dock's watts at least the laptop charger's.
Camera	At eye level, light in front of you, no bright window behind you.
Sound	A headset ends echo. Mute when you're not talking.
Test a call	zoom.us/test, or the preview screen in Teams and Meet.
Internet	Test at your desk. An Ethernet cable is steadiest.
Power	Surge protector for everything; battery backup for computer, modem and router.
Lock the screen	Windows logo key + L (Windows); Control + Command + Q (Mac).
Job offers	Never pay to get a job, cash a check and send money back, or reship packages.

Write it down once

Wi-Fi name and password	_____
Internet company and phone	_____
Computer make and model	_____
Monitor make and model	_____
Dock or hub model	_____
Laptop charger watts	_____
Employer IT help desk	_____
Video-call app(s) I use	_____

When something's wrong, in order

1. Check that everything is plugged in and switched on — including the surge protector.
2. Unplug the cable in question at both ends and plug it back in firmly.
3. Restart the computer (and the dock, by unplugging its power for 30 seconds).
4. In your video-call app, choose the right camera, microphone and speaker again.
5. Run a speed test at your desk; restart the router if it's slow.
6. Still stuck? Call Bill at (330) 200-8042 or book at billshometech.com/book.