BILL'S HOME TECH
Home & Small Business Tech Solutions

BILL'S COMPLETE MANUALS · NO. 103

Smart Christmas Lights

Timers, smart plugs, app-controlled light strings
and voice control — explained in plain English

Lights that come on at sunset, all by themselves

Take your time — you can't break it

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For outdoor timers, smart plugs, Twinkly, Govee, Alexa, Google & Siri · facts current November 2026

What's Inside

This is your holiday lights manual. Read it in any order and at your own pace — there is no test, and you can't fall behind. It covers the three easy ways to make holiday lights smarter: a plain outdoor timer or a smart plug for the lights you already own, app-controlled light strings like Twinkly and Govee, and voice control with Alexa, Google or Siri. It also covers the safety side — outdoor cords, GFCI outlets and ladders — and how to get everything working again next year. Every feature comes with what it actually does *for you*, and slow step-by-step directions anyone can follow. If a screen in your app looks a little different, the idea is still the same.

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PART 1

Getting Started

What "smart" holiday lights really are, the three easy ways to get there, and what you need before you begin. Start here.

CHAPTER 1

A Note from Bill

Hello, and welcome. Holiday lights are one of the nicest parts of the season — the tree glowing in the front window, the porch lit up for visitors, the neighbors' houses twinkling on the drive home. What's not so nice is the chore that comes with them: crawling behind the tree to find the plug, going out in the cold every evening to switch the porch lights on, and remembering to switch them off again before bed.

That's what this guide is for. With a small, inexpensive gadget or two, your lights can come on by themselves at sunset and go off by themselves at bedtime. You can turn them on from your chair with your phone, or just by saying, "Alexa, turn on the Christmas tree." No more cold walks to the outlet, and no more lights burning all night because somebody forgot.

You can't break it

Some of this may sound technical — Wi-Fi, apps, "2.4 GHz" — but every word gets explained the first time it comes up, in plain English. Nothing in here is dangerous to try on your phone. If a setting doesn't do what you hoped, you just change it back. The only parts where I'll ask you to slow down and be careful are the electrical safety and ladder chapters, and that's about cords and rungs, not about apps.

WHAT THIS DOES FOR YOU

What smart lights really give you

A home that looks warm and welcoming every evening of the season without you lifting a finger. Fewer trips outside on icy steps. The peace of mind of knowing the tree turns itself off at night. And if you're away visiting family, a house that still lights up on schedule so it looks lived-in.

I'm only a phone call away

I've spent 30+ years in professional technology work, and these days I help folks right here in Portage County, Ohio, get comfortable with exactly this kind of thing. If you get stuck — a plug that won't connect, a light string that won't show up in the app — call me at **(330) 200-8042** and we'll sort it out together, with no rushing and no judgment.

— Bill

CHAPTER 2

Three Easy Routes to Smarter Holiday Lights

There's no single "smart Christmas light" you have to buy. There are three easy routes, and you can mix and match them. Most homes end up using two of the three.

Route 1: Make the lights you already own smart

Your existing light strings — the ones in the boxes in the basement — can stay exactly as they are. You plug them into a small box that does the switching for you. That box can be:

- **A plain outdoor timer** — a simple, no-app gadget with a dial or buttons. Set it once and it turns the lights on and off at the same times every day. No Wi-Fi, no phone, no account.
- **An outdoor smart plug** — a weatherproof plug that connects to your home Wi-Fi. You control it from a free app on your phone, it can follow sunset automatically, and it works with Alexa, Google or Siri.

Route 2: App-controlled light strings

These are new light strings with a small computer built in. Brands like **Twinkly** and **Govee** make them. Every bulb can be a different color, and the app can make them twinkle, fade, chase, or even dance to music. They're the fancy option — more fun, and more expensive.

Route 3: Voice control

If you have an Amazon Echo (Alexa), a Google Nest speaker, or an iPhone (Siri), you can connect either of the first two routes to it. Then "Alexa, turn on the porch lights" just works. You can even build one phrase — "Alexa, light up the house" — that switches on everything at once.

> **TIP**
>
> **Start small**
>
> If you're new to all of this, start with one outdoor smart plug for the porch lights, or one indoor smart plug for the tree. Get comfortable with that, and add more next year if you like it. You don't have to do everything at once.

Where this guide fits

If you'd like more on smart plugs for lamps and everyday use, our Smart Plugs & Switches guide goes deeper. For colored bulbs around the house, see our Smart Lights guide. And for

everything else your Echo or Nest speaker can do, there are separate Amazon Alexa & Echo and Google Nest guides. This guide sticks to holiday lights.

CHAPTER 3

What You'll Need Before You Start

A plain mechanical or digital timer needs nothing but an outlet. For anything smart — a smart plug or app-controlled lights — gather these first. It makes setup smooth instead of stop-and-start.

What	Why you need it
Home Wi-Fi	Your wireless internet. Smart plugs and smart lights connect to it so your phone can reach them.
Your Wi-Fi name and password	Written down and handy. You'll type the password once during setup. It's often printed on a sticker on your router (the box your internet comes through).
A smartphone or tablet	iPhone or Android, with Bluetooth turned on. Many devices use Bluetooth for the first few minutes of setup.
The maker's free app	Kasa or Tapo for TP-Link plugs, Twinkly for Twinkly lights, Govee Home for Govee lights. Download it from the App Store or Google Play.
A free account	Each app asks you to make an account with an email address and a password. Write these down too — you'll need them again next year.
A GFCI-protected outdoor outlet	For anything outside. See Chapter 22 for what that means and how to check.

HEADS UP

The Wi-Fi detail that trips everyone up

Nearly all smart plugs and smart light strings connect only to the **2.4 GHz** part of your Wi-Fi, not the faster 5 GHz part. Most routers offer both, so this usually just works — but when setup fails, this is the first suspect. Chapter 20 explains it in plain English.

Write things down as you go

Holiday gadgets get used for six weeks and then sit in a box for ten months. By next November, nobody remembers which app or which password. Use the "Write these down" table in the cheat-sheet (Chapter 30) and tuck it in the box with the lights.

CHAPTER 4

Which Route Is Right for You?

Here's the honest comparison. None of these is "best" — it depends on what you want and what you already own.

	Plain outdoor timer	Outdoor smart plug	App-controlled lights
Works with lights you own	Yes	Yes	No — new lights
Needs Wi-Fi and an app	No	Yes	Yes
Follows sunset automatically	Only models with a light sensor or an "astronomic" setting	Yes	Usually, through the app or a voice assistant
Control from your phone	No	Yes	Yes
Works with Alexa / Google	No	Yes	Yes
Colors and effects	No	No	Yes
Relative cost	Lowest	Low	Highest

A few honest suggestions

- **You just want the porch lights on at dusk and off at bedtime:** a plain outdoor timer or one outdoor smart plug does it beautifully.
- **You'd like to say "Alexa, turn on the tree":** a smart plug behind the tree is the cheapest way there.
- **You love the look of colored, twinkling, changing lights, or the grandkids do:** that's what Twinkly and Govee are for.
- **You'll be away for part of the season:** a smart plug's "away" mode or a schedule keeps the house looking lived-in (Chapter 9).

FROM BILL

No need to buy the fanciest thing

I'd always rather you spend less and enjoy it more. A plain timer that works every night is a better buy than an expensive light show that frustrates you. If you'd like a second opinion before you spend money, that's a quick phone call.

PART 2

Route 1: Timers & Smart Plugs for the Lights You Own

Keep your favorite light strings and let a timer or a smart plug do the switching — on at sunset, off at bedtime, every night of the season.

CHAPTER 5

Plain Outdoor Timers — No App Needed

Before smart plugs came along, there was the humble outdoor timer, and it's still a fine choice. It plugs into the outlet, your lights plug into it, and it switches them on and off on its own. No Wi-Fi, no app, no account — and nothing to re-pair next year.

The three kinds you'll see in the store

Kind	How it works
Dial (mechanical) timer	A round dial with little pins or tabs around the edge. Push down the tabs for the hours you want the lights on. Simple and sturdy. It loses its time if the power goes out, so check it after a storm.
Digital timer	Buttons and a small screen. More precise, can do different times on different days. Takes a few minutes with the instructions to set up.
Light-sensing (photocell) timer	Has a small light sensor. It turns the lights on when it gets dark and off after a set number of hours, or at dawn. The sensor has to see the sky, so don't hide it under a bush or in a dark corner.

GOOD TO KNOW

"Astronomic" timers

Some digital timers are called **astronomic**. You tell them your location (or ZIP code) once, and they work out sunset for each day of the year by themselves — no sensor needed. Read the box: if it says astronomic, sunrise/sunset, or dusk-to-dawn, it follows the seasons.

Setting a dial timer

1. Turn the dial until the arrow points to the **current time** of day. Most dials show AM and PM with light and dark shading.
2. Push down the tabs for the hours you want the lights **on** — for example, from 5 p.m. to 11 p.m.
3. Make sure any small on/off switch on the side is set to **Timer** (sometimes marked with a clock), not **On**.
4. Plug the timer into the outdoor outlet, then plug your lights into the timer.
5. Check it that first evening. If the lights come on an hour off, the dial's current time was set wrong — just turn it to the right time.

STAY SAFE

Use an outdoor-rated timer outside

Indoor timers aren't made for rain and snow. For porch and yard lights, buy one labeled for outdoor use, keep its cover closed, and plug it into a GFCI-protected outlet (Chapter 22).

WHAT THIS DOES FOR YOU

What this does for you

For a few dollars and five minutes, your lights run themselves for the whole season. It's the easiest win in this guide, and there's no technology to fuss with.

CHAPTER 6

Choosing an Outdoor Smart Plug

A **smart plug** is a timer that talks to your phone. It connects to your home Wi-Fi, and an app on your phone tells it when to switch on and off. An **outdoor** smart plug is built to handle rain, snow and cold.

What to look for on the box

- **"Outdoor" and an IP rating.** IP stands for "ingress protection" — how well it keeps out dust and water. Look for something like IP64 or IP65. Higher second numbers mean more water-resistant. An indoor plug does not belong outside, ever.
- **Two outlets** if you can. Many outdoor plugs have two, and you can control each one separately — say, the porch lights on one and the yard tree on the other.
- **Works with Alexa / Google / Apple Home.** Check that it works with the voice assistant you have. "Matter" on the box means it works with all three (more on Matter in Chapter 19).
- **A safety listing mark** such as UL or ETL from a nationally recognized testing lab (Chapter 26).

Brands you'll see

TP-Link makes two popular lines. **Kasa** outdoor plugs use the **Kasa** app; **Tapo** outdoor plugs, such as the Tapo P400M, use the **Tapo** app. Both work much the same way. Kasa's outdoor plugs (models such as the KP401 and EP40) are weather-resistant with a rubber cover over each outlet, and support schedules, sunrise and sunset times, timers, and an away mode. The Tapo P400M is rated IP65, has two separately controlled outlets, works with Alexa, Google Assistant and Siri, and is Matter-certified.

HEADS UP

Older brands that stopped working

A few smart-plug brands from past years have been discontinued, and their apps no longer run. If you find an old smart plug in the holiday box that won't connect at all, check whether the maker still supports it before spending an evening on it. If not, replace it with a current model.

TIP

Good to know — cost

Outdoor smart plugs usually cost a bit more than indoor ones, but far less than a set of app-controlled lights. Prices change constantly around the holidays, so compare a couple of stores. You don't need a subscription for any of the features in this guide.

CHAPTER 7

Setting Up Your Outdoor Smart Plug

Set the plug up **indoors first**, near your router, where the Wi-Fi is strongest and you're warm. Once it's working, unplug it and take it outside. It remembers your Wi-Fi.

Setting up a Kasa outdoor plug

1. Download the free **Kasa Smart** app from the App Store or Google Play.
2. Open the app and sign in with your **TP-Link ID**, or tap to create one (an email and a password).
3. Plug the smart plug into an outlet. Its light should blink orange and green, which means it's ready to set up.
4. In the Kasa app, tap the **+** button, then choose **Smart Plug** and then **Smart Outdoor Plug**.
5. Follow the prompts. When asked, choose your home Wi-Fi and type the password carefully.
6. When the plug's light turns **solid green**, it's connected. Give each outlet a clear name, like **Porch Lights** or **Yard Tree**. You'll use these names with Alexa later.

Kasa outdoor plug light	What it means
Blinking orange and green	Ready for setup.
Blinking green	Looking for Wi-Fi.
Solid green	Connected. All good.
Red	No Wi-Fi connection.
Blinking orange	Resetting.

Setting up a Tapo outdoor plug

It's the same idea in the **Tapo** app: sign in with your TP-Link ID, tap **+** to add a device, pick the outdoor plug, and follow the prompts. The Tapo P400M can also be added straight into Alexa, Google Home or Apple Home by scanning the Matter code that comes with it, if you'd rather not use the Tapo app.

TIP

Names matter

Pick short names you'd naturally say out loud: "Porch Lights," "Tree," "Garage Wreath." Avoid names that sound alike, like "Front Light" and "Front Lights," or Alexa may mix them up.

HEADS UP

If setup fails

The usual causes are a mistyped Wi-Fi password, the phone being on the 5 GHz network, or the plug being too far from the router. Chapter 21 walks through the fixes in order.

CHAPTER 8

Schedules and Sunset Timers

A **schedule** tells the plug to turn on or off at a certain time, on certain days. The holiday favorite is **on at sunset, off at 11 p.m.** Because sunset gets earlier through December, a sunset schedule keeps up automatically — no adjusting.

Making a sunset schedule in the Kasa app

1. On the Kasa app's home page, tap your outdoor plug (or one of its outlets).
2. Tap the **Schedule** icon, then tap **+** in the top corner.
3. Choose **On**, and instead of a clock time, choose **Sunset**.
4. Pick the days — usually every day — and tap **Save**.
5. Tap **+** again to make a second schedule: **Off** at a time you choose, such as 11:00 PM. Save.
6. You'll see both schedules listed. You can switch either one off for a night without deleting it.

GOOD TO KNOW

Sunset is based on your location

The app works out sunset from your home's location. If the lights come on at a strange time, check that the location and time zone in the app's settings are right for Portage County (or wherever the lights are).

GOOD TO KNOW

Schedules live on the plug itself

TP-Link says schedules and timers are stored on the Kasa plug, so they keep working even if your internet goes down for an evening. You just can't change them from your phone until the internet is back.

Using Alexa or Google instead

You can also schedule a smart plug from the Alexa app or the Google Home app with a routine that starts at sunset. That's handy when you want several different brands to come on together. Chapter 18 shows how.

TIP

Pick one place for schedules

If you schedule the same plug in two places — say, in the Kasa app and in an Alexa routine — they can fight each other, and the lights seem to switch on and off at random. Keep each plug's schedule in one place.

WHAT THIS DOES FOR YOU

What this does for you

The lights are on when you pull into the driveway after dark, and off when you go to bed, every night until you delete the schedule in January. You never touch the plug again.

CHAPTER 9

Timers, Away Mode and Looking Lived-In

The countdown timer

A **timer** is a one-time countdown: "turn off in 2 hours." It's perfect for the tree on a night you're watching a movie and might nod off.

1. In the Kasa app, tap the plug, then tap the **Timer** icon.
2. Choose how long, and whether the plug should turn on or off when time is up.
3. Tap **Start**. You'll see it count down. Tap **Stop** to cancel.

Away mode — making the house look lived-in

If you'll be away for a few days over the holidays, **Away Mode** turns the plug on and off at random times within a window you choose — say, 6 p.m. to midnight. To anyone passing by, it looks like someone's home moving from room to room.

1. In the Kasa app, tap the plug, then tap the **Away Mode** icon.
2. Set the start and end time of the window, such as 6:00 PM to 11:59 PM.
3. Choose which days it should repeat, then save.
4. When you get home, switch Away Mode off so your regular schedule takes over again.

Tapo outdoor plugs have an Away Mode too, and Alexa offers a similar feature for some homes. Our Amazon Alexa & Echo guide covers that one.

TIP

Away mode works best on indoor lights

Holiday lights that flick on and off at random can look a little odd. Many folks use Away Mode on an indoor lamp or the tree in the front window, and keep the porch lights on a plain sunset schedule.

STAY SAFE

Don't leave the tree on while you're away

Safety groups advise turning holiday lights off when you leave home or go to sleep. If you're away for days, keep a live tree's lights off entirely, and use a lamp for the lived-in look instead.

CHAPTER 10

Grouping Several Plugs — One Tap for the Whole House

Once you have two or three plugs — the porch, the yard tree, the window candles — you'll want to switch them all together. That's what a **group** is for.

Making a group in the Kasa app

1. On the Kasa app's home page, tap the **+** button and choose **Device Group**.
2. Tick each plug (or outlet) you want in the group, then tap **Save**.
3. Give the group a name, such as **Christmas Lights**.
4. The group appears on the home page. Tap **On** or **Off** to switch everything in it at once.

Scenes and scheduled scenes

A **scene** sets several devices the way you like with one tap — for example, porch lights on, yard tree on, and the indoor tree on. In the Kasa app, you can create a scene and then use a **Smart Action** called **Schedule a Scene** to run it at a set time each day.

GOOD TO KNOW

Mixing brands

A Kasa group only holds Kasa devices. If you have a Tapo plug, a Twinkly tree and a Govee string, the way to switch them all together is an Alexa routine or a Google Home automation. See Chapter 18.

WHAT THIS DOES FOR YOU

What this does for you

One tap — or one sentence — and the whole house lights up. No walking from outlet to outlet in the cold, and no forgetting the one string around the back.

PART 3

Route 2: App-Controlled Light Strings

Twinkly and Govee lights: every bulb its own color, effects you pick on your phone, and lights that can even dance to the music.

CHAPTER 11

What App-Controlled Lights Are

An ordinary light string has one job: on or off. An app-controlled string has a tiny computer in its controller box and a chip in every bulb, so each bulb can be told what color to be and when. Your phone sends the instructions over Wi-Fi or Bluetooth.

What they can do

- **Any color, any bulb** — warm white for a classic look, multicolor, or your team's colors.
- **Effects** — twinkle, sparkle, fade, chase, snowfall and many more, picked from a list in the app.
- **Mapping** — you take a short video of your tree with your phone, and the app works out where each bulb is, so effects flow neatly up the tree or across the house.
- **Music sync** — lights pulse and change with music (Chapter 16).
- **Timers and voice control** — on at dusk, off at bedtime, and "Alexa, turn on the tree."

The two big names

Brand	What to know
Twinkly	Light strings, curtains, icicles and pre-lit trees, run from the free **Twinkly** app. Newer sets are called **Generation II**; older ones **Generation I**. Some features, like brightness by voice, need Generation II.
Govee	Christmas string lights and many other holiday lights, run from the free **Govee Home** app. The Govee Christmas String Lights 2 come in 66-, 99-, 164- and 328-foot lengths, with 130+ preset scenes and 10+ music modes.

TIP

Good to know — cost

App-controlled lights cost noticeably more than ordinary strings. In November 2026, Govee listed its 99-foot Christmas String Lights 2 at $129.99, with early holiday sale prices below that. Prices move a lot in November and December, so check before you buy, and buy from the maker's own website or a store you know (Chapter 26 explains why).

GOOD TO KNOW

Do you need one for the tree?

Govee's guide: about 66 feet of string for a 6-foot tree, 99 feet for a 7.5-foot tree, and 164 feet for a 9-foot tree. More length means more bulbs, and a fuller look.

CHAPTER 12

Setting Up Twinkly Lights

Twinkly lights are set up with the free **Twinkly** app. Lay the lights out or put them on the tree first, plug them in, and keep your phone close to the controller box.

Before you start

- Your phone should be on your home Wi-Fi, with **Bluetooth** turned on.
- Twinkly works **only with 2.4 GHz Wi-Fi**. It won't join a hidden network or a guest network.
- Your Wi-Fi name must be **31 characters or fewer**.
- On an iPhone, the Twinkly app needs permission for **Bluetooth**, **Local Network** and **Camera** (the camera is for mapping). If you tapped "Don't Allow" by mistake, open the iPhone's **Settings**, scroll down to **Twinkly**, and switch those on.

The setup, step by step

1. Download the free **Twinkly** app and open it. Create an account or sign in.
2. Plug in the lights. Follow the app's prompt to add a new device; it finds the lights over Bluetooth.
3. When asked how to connect, choose **Wi-Fi** (your home network) rather than **Direct**. Wi-Fi unlocks timers, voice control and control from anywhere in the house.
4. Pick your home Wi-Fi network and type the password.
5. Wait for a **green dot** next to the device name in the app. Green means connected and ready; **gray** means offline.
6. Give the lights a friendly name, like **Tree**.

> GOOD TO KNOW
>
> **What "Direct" mode is**
>
> Twinkly can also make its own little Wi-Fi network that your phone connects to directly. It's a fallback for places with no home Wi-Fi, but you lose voice control and you have to switch your phone's Wi-Fi over every time. For a home setup, choose your home Wi-Fi.

HEADS UP

If the app can't find the lights

Check that Bluetooth is on and the app has its permissions, stand closer, and make sure the lights are plugged in and the controller's light is on. If your router uses one name for both 2.4 GHz and 5 GHz, see Chapter 20.

CHAPTER 13

Twinkly Timers, Mapping and Effects

Setting the Twinkly timer

1. Make sure your phone is on the **same home Wi-Fi** as the lights and the device shows a green dot. The timer can only be set this way.
2. In the Twinkly app, tap **Controls**.
3. Turn on the **Timer** and set your **On** and **Off** times.
4. Wait a few seconds before closing the app, so the lights can save the new times.

GOOD TO KNOW

Twinkly's timer limits

The Twinkly app allows only **one** timer at a time, and the lights have to stay plugged in for it to work (on older Generation I sets, the timer is cleared if the power is cut). If you want different times on different days, or on at sunset, use an Alexa or Google routine instead (Chapter 18) — and then turn the Twinkly app's timer off so the two don't fight.

Mapping — teaching the app where the bulbs are

Mapping is optional, but it makes effects look far better. The app asks you to point your phone's camera at the lights while it flashes them in a pattern, and from that it works out where each bulb sits on the tree. Stand back far enough to see the whole tree, in a dim room, and hold the phone steady. On an iPhone, the app needs camera permission for this.

Picking an effect

Browse the effects in the app and tap one to try it. You can adjust brightness, and on many effects, speed and colors. If you find a look you love, save it so you can come back to it. Scenes you create in the Twinkly app also show up in Alexa automatically, so you can call them by name.

TIP

Less is more at night

Fast, flashing effects can be tiring to look at, and some people find them uncomfortable. A slow twinkle or a steady warm white is restful and looks lovely from the street.

CHAPTER 14

Setting Up Govee Christmas Lights

Govee lights are run by the free **Govee Home** app. Set them up near the house first if you can, where the Wi-Fi is strong.

Before you start

- Govee's Wi-Fi lights work only on **2.4 GHz** Wi-Fi. If your router has separate names for 2.4 and 5 GHz, connect your phone to the 2.4 GHz one during setup.
- Turn on **Bluetooth** on your phone. Govee uses it to find the lights.
- Check the box says **Wi-Fi**. A few lower-priced Govee lights are Bluetooth-only; those work from your phone up close but not with Alexa or Google, or from away from home.

The setup, step by step

1. Download the free **Govee Home** app, open it, and create an account or sign in.
2. Plug in the lights.
3. In the app, tap the **+** to add a device, and pick your lights from the list (or let the app find them nearby).
4. Follow the prompts. When asked, choose your home Wi-Fi and type the password.
5. When it's done, give the lights a simple name, such as **Tree** or **Porch String**.

STAY SAFE

Keep the Govee power adapter dry

The light string itself is rated IP65 for outdoor use, but Govee says the **power adapter is for dry locations** on most lengths. Put the adapter somewhere dry, such as inside the garage, or in an outdoor-rated weatherproof box. Never leave it lying on wet ground or in snow.

HEADS UP

If setup won't finish

Govee's own advice: check the Wi-Fi password, move the lights closer to the router or restart the router, and make sure your router doesn't block new devices. If a set refuses to reconnect, delete it from the Govee Home app, unplug it for 10 minutes, and add it again.

CHAPTER 15

Govee Scenes, Shape Mapping and Schedules

Scenes

The Govee Christmas String Lights 2 come with more than 130 preset animated scenes — Christmas, snow, candy cane and many more. Open the lights in the Govee Home app, browse the scenes, and tap one to try it. Pick a favorite and it stays on until you change it.

Shape mapping

Like Twinkly, Govee can learn where each bulb is. Govee calls it **Shape Mapping**: you take a short video of the lit tree or house with your phone, and the app calculates the shape, so effects flow the way they should.

Making your own effects

The newer Govee app also has an AI tool that will make a custom effect from a few words you type or say, such as "slow red and green twinkle," or even from a photo. It's a fun one to try with the grandchildren. You don't need it to enjoy the lights.

Schedules

Look in the light's settings in the Govee Home app for a schedule or timer option to turn the lights on and off at set times. The exact name and spot can differ from one Govee model to another. If you want the lights on at sunset, or switching together with other brands, an Alexa routine or a Google Home automation does it neatly (Chapter 18).

> TIP
>
> **One schedule per light**
>
> As with every brand here, schedule the lights in just one place — the Govee app *or* Alexa *or* Google — so they don't fight each other.

CHAPTER 16

Music Sync — Lights That Dance

Both Twinkly and Govee can make the lights react to music — pulsing on the beat, changing color with the song. It's a hit at a holiday party or when the grandkids visit.

Govee

The Govee Christmas String Lights 2 have a **built-in microphone** in the controller and 10+ **music modes**. Pick a music mode in the Govee Home app, play music nearby, and the lights follow along. No extra box is needed.

Twinkly

The Twinkly app can sync some effects to music using your **phone's microphone**, with nothing extra to buy — the app has to stay open while it listens. For a fuller show, Twinkly sells a small add-on called **Twinkly Music** that plugs into USB power, has its own microphone, can sync several Twinkly devices at once, and doesn't need the app running. It connects over 2.4 GHz Wi-Fi and must be on the same Wi-Fi as your lights.

TIP

Where to put the music

The microphone hears what's in the room. Put the speaker reasonably close to the controller (or the Twinkly Music box), and turn the volume up a little. Outdoor strings with the controller inside the garage won't hear music on the patio.

HEADS UP

Be kind to the neighbors

Music-synced lights are great fun for an hour. Running a flashing light show late into the evening may not be appreciated next door. A sunset-to-10-p.m. schedule keeps everyone smiling.

PART 4

Route 3: Voice Control

Connect your plugs and lights to Alexa, Google or Siri — then "Alexa, light up the house" does it all.

CHAPTER 17

Voice Control with Alexa

If you have an Amazon Echo, you can control your holiday lights by voice. You connect each brand to Alexa once, in the **Alexa** app on your phone. After that, Alexa knows your lights by the names you gave them.

Connecting a Kasa plug to Alexa

1. Open the **Kasa Smart** app and go to the **Me** page.
2. Tap **Third-Party Services**, then **Amazon Alexa**.
3. Follow the instructions to link your Kasa account to your Amazon account.
4. When it's done, say, "Alexa, discover devices," or wait a minute. Your plugs appear in the Alexa app.

Connecting Twinkly to Alexa

1. Make sure the lights are on your home Wi-Fi, on the latest firmware, and added to your Twinkly account.
2. Either: in the **Twinkly** app, go to **Settings**, then **Integrations**, then **Amazon Alexa**; or in the **Alexa** app, go to **Skills & Games**, search for **Twinkly**, and enable the skill.
3. Sign in with your Twinkly email and password when asked.
4. Try it: "Alexa, turn Twinkly on."

Connecting Govee to Alexa

In the Alexa app, add the Govee skill (search for **Govee** under Skills & Games) and sign in with your Govee Home account. Your Govee lights then show up as devices you can name and control.

Things you can say

Say this	What happens
"Alexa, turn on the porch lights."	Switches that plug or light on.
"Alexa, turn off the tree."	Switches the tree off.
"Alexa, set Twinkly to 50 percent."	Dims Twinkly Generation II lights.
"Alexa, set Twinkly to red."	Changes the main color (Twinkly Generation II).
"Alexa, set the curtain lights to snowman."	Picks a Govee scene by name, as Govee shows it.

Say this	What happens
"Alexa, turn on Christmas Lights."	Switches on an Alexa group with that name.

TIP

Put devices in an Alexa group

In the Alexa app, you can put several lights into a group named, say, "Christmas Lights." Then "Alexa, turn on Christmas Lights" switches every brand at once. Our Amazon Alexa & Echo guide shows how to make groups.

CHAPTER 18

"Alexa, Light Up the House" — Building a Holiday Routine

A **routine** is a little recipe you build once: *when this happens, do these things*. The "when" can be a phrase you say, or a time of day — including sunset. The "do" can be any number of lights, plugs, music and announcements.

A phrase routine: "Alexa, light up the house"

1. Open the **Alexa** app. Tap **More**, then **Routines**, then the **+**.
2. Tap **When this happens**, choose **Voice** (when you say something), and type **light up the house**.
3. Tap **Add action**, choose **Smart Home**, and pick the first light or plug, set to **On**.
4. Add more actions for each of the other lights. You can also add music — "play Christmas music" — as an action.
5. Tap **Save**. Wait a minute, then say, "Alexa, light up the house."

A sunset routine

Make another routine, but for **When this happens** choose **Schedule**. Alongside set times, you'll usually see a choice for **sunrise** or **sunset**. Pick **sunset**, choose the days, and add your lights as actions. Then make a third routine at a set time, such as 11 p.m., that turns the same lights off. Alexa works out sunset from your device's location, so check that your Echo's address is right in the Alexa app's device settings.

GOOD TO KNOW

A good-night routine helps too

If you already have an "Alexa, good night" routine, add "turn off the tree" and "turn off the porch lights" to it. Then the lights go off the moment you head to bed.

The same idea in Google Home

Google calls these **automations**. In the Google Home app, an automation can start at a set time, at sunset or sunrise, or a set number of minutes after sunset, and can turn devices on or off. It can also start when you say a "Hey Google" phrase that you choose.

TIP

Turn off the brand's own timer

If a routine runs the lights, switch off the timer or schedule in the light's own app. Twinkly specifically warns that an Alexa or Google routine and its own timer can override each other, which looks like the lights turning on and off at random.

FROM BILL

A lovely thing to set up together

Routines have a few more taps than anything else in this guide. If you'd like a "light up the house" phrase and a sunset routine set up just right, it's one of my favorite small jobs.

CHAPTER 19

Google Home, Siri and Matter

Google Assistant and Nest speakers

Kasa, Tapo, Twinkly and Govee all work with Google. You link each one in the **Google Home** app by adding a device that "works with Google" and signing in to the brand's account. Some Kasa plugs can also be set up directly inside the Google Home app. Then say, "Hey Google, turn on the porch lights." With Twinkly, "Hey Google, turn Twinkly on" works on both generations, and Generation II adds brightness control.

GOOD TO KNOW

Google may not do colors in automations

Google notes that third-party devices don't always support every feature. For example, you might be able to switch a light on and off but not change its color or effect. Light effects and color changes aren't currently supported in Google Home automations — use the light's own app for those.

Siri and Apple Home

Siri controls lights that are added to Apple's **Home** app. Twinkly Generation II lights can be added to Apple Home, after which Siri can switch them on and off, change brightness and change the main color. The Tapo P400M outdoor plug works with Siri through Apple Home.

What "Matter" means

Matter is a shared standard that lets one smart device work with Alexa, Google Home, Apple Home and Samsung SmartThings, without a separate brand account in each. If the box shows the Matter logo, you can usually add it by scanning the code on the device or box with the app of your choice. The Tapo P400M outdoor plug and the Govee Christmas String Lights 2 both list Matter support.

TIP

Keep the Matter code

The Matter setup code is a small square pattern on a sticker or card. Take a photo of it with your phone, and keep the card in the box. You'll want it if you ever have to set the device up again.

PART 5

Wi-Fi Outdoors & Fixing Hiccups

Why outdoor gadgets lose their signal, the 2.4 GHz rule in plain English, and a calm checklist for lights that won't connect or won't respond.

CHAPTER 20

Wi-Fi Reach Outdoors and the 2.4 GHz Rule

Your Wi-Fi comes from the router — the box, usually with small lights, that your internet company installed. Its signal spreads out through the house like the warmth from a fireplace: strong nearby, weaker the farther you go, and much weaker through brick, stone, metal siding and outside walls.

Check the signal where the plug will go

1. Stand where the outdoor plug or the light controller will sit.
2. Look at the Wi-Fi symbol at the top of your phone. Three bars (or a full fan) is good; one bar is trouble.
3. Better still, try streaming a short video there. If it plays smoothly, a smart plug will be happy.
4. If the signal is weak, try a different outlet closer to the router, or the outlet on the other side of the house.

GOOD TO KNOW

Outdoor plugs with longer reach

Some outdoor plugs are built to reach farther. Tapo says its P400M, with two antennas, reaches up to 300 feet in open areas — but adds that walls, distance and other devices reduce that in real life.

The 2.4 GHz rule, in plain English

Most modern routers broadcast Wi-Fi in two "lanes": **2.4 GHz** and **5 GHz**. Think of them as two radio stations. The 5 GHz lane is faster but doesn't travel as far. The 2.4 GHz lane is slower but reaches farther and passes through walls better — which is exactly why outdoor gadgets use it.

Kasa says its smart devices support only 2.4 GHz Wi-Fi. Twinkly works only with 2.4 GHz. Govee's Wi-Fi lights work on 2.4 GHz only. None of them needs a separate hub.

When the two lanes share one name

Many routers — and most mesh systems — use **one Wi-Fi name** for both lanes and steer each device automatically. Usually that's fine, and the plug finds the 2.4 GHz lane on its own. When setup keeps failing, the makers suggest two fixes:

- **Give the two lanes different names** in your router's settings (for example, "Smith" and "Smith-5G"), then connect your phone and the device to the 2.4 GHz one.
- **Turn off the 5 GHz lane temporarily** during setup, then turn it back on afterward.

> **FROM BILL**
>
> **This is the most common call I get about smart plugs**
>
> Router settings differ from brand to brand, and the screens can be confusing. If you've tried twice and setup still fails, it's very likely this, and it's usually a quick fix together.

Things that block an outdoor signal

- Brick, stone and stucco walls; metal siding or a metal garage door.
- A router tucked in a basement corner or inside a cabinet.
- Distance — the far end of a long yard.

If your outdoor gadgets keep dropping off, a **mesh Wi-Fi** point or an extender near that side of the house usually solves it for good.

CHAPTER 21

When the Lights Won't Connect or Respond

Almost every problem with smart holiday lights is one of a handful of things. Work down this list in order. Most of the time you'll be done by step 3.

The calm checklist

1. **Is it plugged in and switched on?** Check the outlet, the GFCI outlet's reset button (Chapter 22), and any power strip.
2. **Is the internet working?** Try another device. If nothing in the house can get online, restart the router: unplug it for 30 seconds, plug it back in, and wait two minutes.
3. **Unplug the smart plug or light controller for 10 seconds,** then plug it back in. Give it a minute to reconnect.
4. **Is your phone on the 2.4 GHz Wi-Fi?** For first-time setup, it matters (Chapter 20).
5. **Is the signal reaching it?** Try the same plug indoors near the router. If it works there, the outdoor spot is too far.
6. **Did the Wi-Fi name or password change?** If you got a new router, see Chapter 28.
7. **Still stuck?** Reset the device and set it up again (below).

Resetting a Kasa outdoor plug

What you do	What it does
Press and hold the button 5 seconds	Resets just the Wi-Fi connection, keeping your settings. Use this when you've changed routers.
Press and hold the button 10 seconds	Full factory reset. The plug forgets everything; set it up again from the start.
In the app: tap the plug, then Remove Device	Removes it from your account and resets it to factory settings.

When Alexa can't find or control the lights

- Say, "Alexa, discover devices," and wait.
- Check the device is online in its own app first (green dot for Twinkly; solid green light for Kasa).
- For Twinkly, Twinkly suggests disconnecting Alexa in the Twinkly app, fully closing both apps, and linking again. A "Please try again later" message is often a mistyped Twinkly email or password.

When the lights turn on and off at random

That's almost always two schedules fighting — one in the brand's app and one in Alexa or Google. Look in each app, delete the extras, and keep one.

TIP

Only one section of a string is out?

On ordinary strings, one loose or burned-out bulb can darken a section. Unplug the string first, then check bulbs and the little fuses in the plug. Always unplug before replacing bulbs or fuses.

PART 6

Safety First

Outdoor cords and outlets, ladders, the indoor tree, LED versus old-style bulbs — and the holiday light scams to avoid.

CHAPTER 22

Outdoor Electrical Safety

Electricity and wet weather need respect. The good news: the safety rules are simple, and they're the same for timers, smart plugs and fancy light strings. These come from the Electrical Safety Foundation International (ESFI) and the U.S. Consumer Product Safety Commission (CPSC).

The outdoor rules

- **Use only cords and decorations marked for outdoor use.** Check the tag or package.
- **Match the cord to the load.** An extension cord has an amperage (amp) rating. It should be at least as high as what you plug into it. The package lists it.
- **Plug outdoor lights into a GFCI-protected outlet,** or a portable outdoor GFCI (below).
- **Inspect everything before you use it** — lights, cords and decorations. Throw out sets with broken or cracked sockets, frayed or bare wires, or loose connections.
- **Keep cords and light strings clear of snow and standing water.** Lift connections off the ground.
- **Don't overload outlets** with too many decorations or devices. They can overheat and cause a fire.
- **Fasten lights securely** against wind, but don't staple, nail or pinch the cord — that damages the insulation. Use plastic clips made for holiday lights.
- **Don't run cords through doors or windows** where they get pinched.
- **Turn off decorations before leaving home or going to sleep.** A schedule does this for you.

What a GFCI is

A **GFCI** (ground-fault circuit interrupter) is a safety outlet that shuts the power off in a split second if electricity starts leaking where it shouldn't — through water, or through a person. It's the outlet with the little **Test** and **Reset** buttons. Outdoor outlets in newer homes usually have one, or are protected by one in the garage, basement or a bathroom.

1. Look at your outdoor outlet for Test and Reset buttons. No buttons? It may be protected by a GFCI outlet elsewhere, or not at all.
2. Plug in a lamp or light string and switch it on.
3. Press **Test**. The power should cut off.

4. Press **Reset** to bring it back. If Test doesn't cut the power, the outlet isn't protecting you — have an electrician look at it.

If your outdoor outlet isn't GFCI-protected, ESFI notes you can buy a **portable outdoor GFCI** where electrical supplies are sold. It plugs in and needs no special knowledge to install.

GOOD TO KNOW

Why the lights "just went off" in the rain

A GFCI tripping in wet weather is doing its job. Dry things out, check for a soggy connection lying in a puddle, lift it up, and press Reset.

Rules for outdoor smart plugs

TP-Link's safety notes for its Kasa outdoor plug are worth following for any brand:

- Use it with a **GFCI outlet** outdoors.
- Plug it **directly into the wall outlet** — not into an extension cord or power strip. Your lights' extension cord then plugs into the smart plug.
- Hang it with the **sockets facing down** and at least **2 feet off the ground**, using its mounting tab and a screw.
- Keep the rubber covers on any outlet you're not using.
- Don't remove the round ground pin or use a 3-to-2-prong adapter.
- Don't exceed the plug's electrical rating.

STAY SAFE

When in doubt, call an electrician

Warm or discolored outlets, a GFCI that trips every time, a burning smell, or an outlet that sparks are jobs for a licensed electrician, not for a guide. Stop using that outlet until it's checked.

CHAPTER 23

Ladder Safety, Briefly

Falls are the most common holiday decorating injury, according to the CPSC — more than shocks or fires. A few habits make a big difference.

- **Inspect the ladder** for loose or missing screws, hinges, bolts and nuts before you climb.
- **Use a wooden or fiberglass ladder** outdoors. Metal ladders conduct electricity.
- **Use the right height.** For the roof, the ladder should extend at least 3 feet past the roof edge.
- **Stay at least 10 feet from power lines** — you and anything you're holding.
- **Set it on firm, level ground,** make sure any locks are engaged, and have someone hold the bottom.
- **Don't decorate on wet, icy or windy days.**

FROM BILL

You don't have to be the one on the ladder

Honestly, the smartest way to light the roofline is to let someone younger and steadier do the climbing. Hang the lights once, leave the clips up, and let a timer or smart plug handle the rest from the ground. There's no prize for doing it yourself.

TIP

Light from the ground

Bushes, porch railings, lamp posts and the front-window tree look wonderful and need no ladder at all. A smart plug on a sunset schedule makes them just as magical.

CHAPTER 24

Indoor Tree Lights

Everything in this guide works just as well indoors. A smart plug behind the tree means no more crawling under the branches to reach the outlet — the tree comes on at dusk and goes off at bedtime.

Setting up the tree on a smart plug

1. Plug an **indoor** smart plug into the outlet behind the tree. Indoor plugs are smaller and cost less than outdoor ones.
2. Set it up in its app, just like Chapter 7, and name it **Tree**.
3. Plug the tree's lights into the smart plug. Check that the lights' total wattage is within the plug's rating, printed on the plug or its box.
4. Add a schedule: on at sunset or late afternoon, off at bedtime (Chapter 8).
5. Connect it to Alexa or Google, and you can say, "Alexa, turn on the tree."

Tree safety

- **Live tree:** water it every day. A dry tree catches fire easily. Keep it away from fireplaces, heat vents and radiators.
- **Artificial tree:** look for the label "Fire Resistant." It doesn't mean it can't burn, but it resists catching fire.
- **Never use electric lights on a metallic tree.**
- **Use lights tested by a recognized lab** such as UL or ETL, and check every set, new or old, for damage.
- **Turn the tree lights off when you go to bed or leave the house.** A bedtime schedule makes this automatic.

WHAT THIS DOES FOR YOU

What this does for you

No reaching, no bending behind the tree, and no wondering whether you remembered to switch it off. For anyone with sore knees or a bad back, this one change is worth the whole guide.

CHAPTER 25

LED vs. Old-Style Bulbs: Energy and Safety

If your lights are older, they're probably **incandescent** — the traditional bulbs with a glowing wire inside that get warm to the touch. Newer sets are **LED**. All the app-controlled lights in this guide are LED.

What the Department of Energy says

- Residential LEDs, especially ENERGY STAR rated ones, use **at least 75% less energy** than incandescent lighting, and last up to 25 times longer.
- LED holiday lights use far less electricity than incandescent strings.
- They're **cooler**, which lowers the risk of burns and fire.
- They're **sturdier** — epoxy lenses instead of glass — so they break less often.
- Because they draw so little power, more LED strings can be connected end to end without overloading an outlet. Always follow the maximum number printed on the string's tag.

HEADS UP

Don't mix and match carelessly

Every light string has a tag that tells you how many strings can be connected end to end. Follow it. Mixing old incandescent strings with LED strings on the same run makes it easy to overload, and the old ones run hot.

WHAT THIS DOES FOR YOU

What this does for you

Lower electric bills through December, cooler bulbs around the tree and the grandkids, and lights that last many seasons. If your old strings are frayed or half-dark, LED replacements are a good reason to retire them.

CHAPTER 26

Holiday Light Scams and Counterfeits

Holiday lights are a favorite for scammers, because everyone is shopping for them at the same time and the pictures look wonderful.

SCAM ALERT

"Too good to be true" light ads on social media

The FTC warns that scammers are everywhere online, especially on social media. They pretend to be real companies and run ads for brand-name products at unusually low prices. Click the ad, and you may land on a fake website that takes your money and sends a counterfeit, something that looks nothing like the picture — or nothing at all.

How to shop safely

- **Do some research.** Search the seller's name and the website address, plus words like "review," "complaint" or "scam."
- **Pay by credit card** when you can. If the order never arrives, you can dispute the charge.
- **If the seller wants gift cards, a wire transfer, a payment app or cryptocurrency only,** it's probably a scam.
- **Keep your receipt and order number.**
- **Type the store's address yourself** — twinkly.com, govee.com, tp-link.com, or a store you know — instead of tapping the ad.
- **Report scams** at ReportFraud.ftc.gov.

Counterfeit lights, plugs and chargers

Cheap knock-off light strings, smart plugs and power adapters are a real fire risk. They may use wire that's too thin or skip safety parts, and some carry a fake safety mark. UL has warned about holiday light strings with counterfeit UL marks and stolen holographic labels.

- Look for a listing mark from a **nationally recognized testing laboratory**, such as UL or ETL. The CPSC recommends only using lights tested this way.
- Be wary of a product with no maker's name or address on it.
- Be wary of prices far below what the same item costs at known stores.
- Buy power adapters and replacement controllers from the light's maker.

SCAM ALERT

"Your smart home account has a problem"

A text or email that says your Alexa, Kasa or Govee account is "locked" and gives you a link to fix it is a classic phishing trick. Don't tap the link. Open the app yourself and look — if there's a real problem, the app will tell you.

FROM BILL

When in doubt, call before you click

If a deal, a text or an ad doesn't feel right, give me a call at (330) 200-8042 before you pay or tap anything. A two-minute "is this real?" call is always worth it.

PART 7

After the Holidays, Next Year & Getting Help

Taking it all down, storing it so it works next November, getting gadgets back online after a router change — and when to call Bill.

CHAPTER 27

Taking Down and Storing Your Lights

Before you unplug anything

1. Turn off or delete the holiday **schedules** — in the plug's app, and any Alexa routines or Google automations. Otherwise they'll keep switching an empty outlet all year, and may surprise you when you use that outlet for something else.
2. Or, if you'd like to reuse the same schedule next year, just switch it off rather than deleting it.
3. Take a photo of each app's device list, so you remember the names you used.

Packing up

- **Unplug from the wall first,** then take down the lights. Never pull lights down by the cord.
- **Check for damage as you go.** Throw out any set with cracked sockets, frayed or bare wire.
- **Wrap strings loosely** around a piece of cardboard or a reel, so they don't tangle or kink.
- **Keep each controller and power adapter with its own lights,** in a labeled bag. App-controlled lights need their own controller; another brand's adapter may not fit or may be unsafe.
- **Store in a dry place,** away from mice and extreme heat.
- **Put the outdoor smart plug and timer in the box too,** with their rubber covers on.

TIP

The note that saves next year

Tuck a copy of your filled-in cheat-sheet (Chapter 30) in the box: which app, which account email, and what you named everything. Next November, you'll thank yourself.

GOOD TO KNOW

Leaving a smart plug outside all year?

Outdoor smart plugs are built for weather, and some people leave them up for patio lights in summer. If you do, keep the covers on unused outlets, keep it 2 feet off the ground facing down, and keep it on a GFCI outlet.

CHAPTER 28

Next Year: Getting Everything Back Online

Here's the most common surprise of the season: you plug everything in next November and the app says **offline**. Usually nothing is broken. The most likely reason is that your **Wi-Fi changed** during the year — a new router from the internet company, a new Wi-Fi name, or a new password. Your gadgets are still trying to join the old network.

First, the easy checks

1. Plug the device in and give it two or three minutes. It may just need time to reconnect.
2. Open its app and update the app if the store offers an update.
3. If it still shows offline and your Wi-Fi hasn't changed, unplug it for 10 seconds and try again.
4. If your Wi-Fi *has* changed, move on to the steps for your brand below.

Kasa smart plugs

1. Press and hold the plug's button for about **5 seconds**. This resets just the Wi-Fi connection while keeping its previous settings.
2. In the Kasa app, add it again with **+**, as in Chapter 7, and choose your new Wi-Fi.
3. If that doesn't work, hold the button for **10 seconds** for a full factory reset, and set it up from scratch.

Twinkly lights

Twinkly's way of moving to a new network keeps your layout and settings, so there's no need to map the tree again.

1. If the lights still show a **green dot**: tap the device menu (the LED icon at the bottom right), tap the **gear** next to the lights' name, tap **Network**, and pick the new Wi-Fi.
2. If they show a **gray dot** (offline): hold the controller button until its light turns **solid blue**. This starts Bluetooth setup.
3. Make sure your phone is on the new Wi-Fi. The app finds the lights again; choose the new network when asked.

Govee lights

Open the lights in the Govee Home app and look in their settings for a Wi-Fi option to join the new network. If they won't reconnect, Govee's advice is to delete them from the app, unplug

them for 10 minutes, and add them again.

Then reconnect voice control

Once the gadgets are back on Wi-Fi, they usually reappear in Alexa or Google by themselves. If not, say, "Alexa, discover devices," or relink the brand in the Alexa or Google Home app. Then check your routines still point at the right devices.

TIP

The smoothest trick: keep the same name and password

When you get a new router, ask the installer to give it the **same Wi-Fi name and password** as the old one. Many smart gadgets then reconnect on their own, and you skip this whole chapter.

FROM BILL

A new router is a good time for a visit

If a new router means re-pairing a whole house of plugs, lights, cameras and speakers, that's exactly the kind of afternoon I can save you.

CHAPTER 29

When to Call Bill

This guide is meant to make you confident with your holiday lights, and most of the time it will. But you should never feel you have to wrestle alone with something frustrating — or climb a ladder you'd rather not. Calling for help is a smart move, not a failure.

Good reasons to call

- A smart plug or light string that **won't finish setting up**, even after the 2.4 GHz fixes.
- Outdoor gadgets that keep **dropping off Wi-Fi** — often a signal problem worth solving properly.
- Setting up a **"light up the house" routine** or a sunset schedule across several brands.
- Getting everything **back online after a new router**.
- Deciding **what to buy** — a timer, a smart plug, or app-controlled lights — before you spend money.
- Any time an ad, text, email or caller about your lights or smart home is **pressuring you**.

SCAM ALERT

Real help never cold-calls or demands remote access

No real company will call you out of the blue to say your smart plugs or lights were hacked, demand payment, or insist on remote access to your phone or computer. Those are scams. Hang up and call someone you trust. I'd much rather take a two-minute "is this real?" call than help undo a scam.

How to reach me

I'm Bill, and I help folks right here in **Portage County, Ohio**. Call or text **(330) 200-8042**, or book online at **billshometech.com/book**. If you call the main line and reach my assistant **Sophie**, she can answer simple questions and get you on my schedule. With 30+ years of professional experience, there's very little about a home setup I haven't seen, and no question is too small.

The guides are free to read. My hands-on help is priced as above: **$49 remote · $99 in your home**.

— Bill

CHAPTER 30

Your Holiday Lights Cheat-Sheet

Print this page and keep it handy — or tuck it in the box with the lights.

Everyday moves

I want to…	Do this
Lights on at sunset	Kasa app: tap the plug, Schedule, +, On at Sunset (Chapter 8).
Lights off at bedtime	Add a second schedule: Off at 11:00 PM (Chapter 8).
Off in 2 hours	Kasa app: tap the plug, Timer, set it, Start (Chapter 9).
Look lived-in while away	Kasa app: Away Mode with a time window (Chapter 9).
Everything on together	Kasa Device Group, or an Alexa group or routine (Chapters 10 and 18).
"Alexa, light up the house"	Alexa app: More, Routines, +, Voice (Chapter 18).
Twinkly timer	Twinkly app: Controls, Timer, On and Off times (Chapter 13).
Lights dance to music	Govee music mode or Twinkly music effects (Chapter 16).
Won't connect	2.4 GHz Wi-Fi, closer to the router, restart (Chapters 20 and 21).
Offline after a new router	Kasa: hold 5 seconds; Twinkly: gear, Network (Chapter 28).
Lights died in the rain	Lift wet connections, press Reset on the GFCI (Chapter 22).

Safety in one breath

1. Outdoor-rated plugs, cords and lights only — with a UL or ETL mark.
2. GFCI outlet outside. Smart plug straight into the wall, facing down, 2 feet up.
3. Connections off the ground and out of snow and puddles.
4. Don't overload; throw out damaged sets.
5. Lights off at bedtime and when you leave — let a schedule do it.

Write these down

Item	Mine
Wi-Fi name (2.4 GHz)	_____
Wi-Fi password	_____
Plug app and account email	_____

Item	Mine
Light app and account email	_____
Names I gave my lights	_____
My Alexa / Google phrase	_____
Schedule: on at / off at	_____
Bill's Home Tech	(330) 200-8042 · billshometech.com/book