BILL'S HOME TECH
Home & Small Business Tech Solutions

BILL'S COMPLETE MANUALS

Smart Meat Thermometers

Probes, apps, range and safe temperatures — explained in plain English, one step at a time

A plain-English guide for every home cook

Take your time — you can't break it

Written for you by Bill — Bill's Home Tech

(330) 200-8042 · BillsHomeTech.com

For MEATER, ThermoWorks, Combustion & more · facts current November 2026

What's Inside

This is your guide to smart meat thermometers: the probes that sit in your roast, turkey or brisket and send the temperature to your phone or a small screen. Read it in any order and at your own pace — there is no test, and you can't fall behind. Models and prices change often, so this guide teaches you what to look for and how to use any of them safely, rather than telling you which one to buy.

Part 1 — Getting Started

1 A Note from Bill
2 What a Smart Meat Thermometer Is
3 Is a Smart Thermometer Right for You?

Part 2 — Choosing a Thermometer

4 The Big Three Brands at a Glance
5 MEATER Models Explained
6 ThermoWorks Models Explained
7 Combustion Explained
8 How Range Really Works
9 Buying Smart: What to Check on the Box

Part 3 — Setting Up

10 Unboxing and the First Charge
11 Installing the App and Its Permissions
12 Pairing the Probe with Your Phone
13 Adding Wi-Fi: Bridges, Gateways and Remote Monitoring
14 Alerts That Actually Reach You

Part 4 — Cooking with Your Thermometer

15 Where to Put the Probe, and How Deep
16 Safe Minimum Temperatures
17 Resting and Carryover Cooking
18 The Holiday Turkey
19 Roasts and Everyday Oven Cooking
20 On the Grill: Searing, Flare-Ups and Two-Zone Cooking
21 Low-and-Slow: Smokers and Long Cooks

Part 5 — Care, Charging and Safety

22 Cleaning Your Probe
23 Charging, Batteries and Storage
24 Heat Limits and Probe Safety

Part 6 — When Things Go Wrong

25 When the App Loses the Probe
26 Your Backup: An Instant-Read and an Ice-Water Test
27 Fakes, Scams and Buying Safely

Part 7 — When to Call Bill & Your Cheat-Sheet

28 When to Call Bill
29 Your Smart Thermometer Cheat-Sheet

PART 1

Getting Started

What a smart meat thermometer is, the three kinds you'll see in the store, and whether one makes sense in your kitchen. Start here.

CHAPTER 1

A Note from Bill

Hello, and welcome. If you've ever stood at the oven door poking a roast and wondering, "Is it done yet?" — this guide is for **you**. And if someone in the family gave you one of those little metal probes that talks to your phone, and it's still in the box because the app looked complicated, this guide is for you too.

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 at your kitchen table: slowly, in plain English, and without trying to sell you anything. When I use a word like "ambient" or "carryover," I'll stop and explain it right then.

What this guide will do for you

- Explain the difference between wired, wireless and instant-read thermometers in a few minutes.
- Walk through the popular brands — **MEATER**, **ThermoWorks** and **Combustion** — and what their extra pieces (chargers, gateways, boosters, displays) actually do.
- Set up the phone app, give it the right permissions, and get alerts that really reach you.
- Show you where to put the probe and how deep, so the reading means something.
- Give you the government's safe minimum temperatures, and explain resting and carryover cooking.
- Cover cleaning, charging, heat limits, and what to do when the app goes quiet in the middle of a cook.

The big promise: you can't break it by learning

A smart thermometer is a friendly gadget. You push a probe into the meat, open an app, and watch a number climb. Nothing in the app can hurt the probe, and you can delete and reinstall the app as many times as you like. The few ways people *do* ruin a probe — too much heat, the microwave, the wrong cleaning — are clearly marked in this guide, so you'll know them ahead of time.

WHAT THIS DOES FOR YOU

Why this matters

A good thermometer takes the guessing out of cooking. You stop cutting into the chicken to peek, you stop serving dry pork "just to be safe," and you can sit down with your family instead of hovering by the grill. Most important of all, you **know** the food reached a safe temperature.

STAY SAFE

The one rule I'll repeat

A thermometer is only as good as its battery and its signal. If the app stops updating or the probe's battery dies, don't assume the food is done or safe. Check it with a plain instant-read thermometer. Chapter 26 explains why I recommend keeping an inexpensive one in the drawer.

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 — especially when it's the night before a holiday dinner.

Let's start with the simplest question: what exactly *is* a smart meat thermometer?

— Bill

CHAPTER 2

What a Smart Meat Thermometer Is

A **smart meat thermometer** is a probe that goes into your food and sends the temperature to your phone or a small screen, so you can watch the cook from another room. Most also measure the heat *around* the food, and many guess how long until it's done.

Words you'll see, in plain English

Word	What it means
Probe	The metal spike that goes into the food. The temperature sensor is near the pointed tip.
Internal temperature	How hot the **inside** of the food is. This is the number that tells you when it's done and safe.
Ambient temperature	How hot the **air around** the food is — the oven, grill or smoker temperature. Many wireless probes measure it with a sensor in the handle end.
Wired probe	A probe with a heat-proof cable that runs out of the oven or grill to a base unit.
Wireless probe	A probe with no cable at all. A tiny battery and radio are built inside it.
Bridge, gateway, booster or repeater	A small box that sits near the cooker, catches the probe's short-range signal and passes it on — often over your home Wi-Fi.
Prediction	The app's estimate of when the food will be ready. Handy, but it's a guess.

The three kinds of thermometer

	Instant-read	Wired smart	Wireless smart
How it works	Poke, read, pull out	Probe stays in; cable to a base	Probe stays in; no cable
Stays in while cooking?	No	Yes	Yes
Phone app?	Usually not	Often (Wi-Fi or Bluetooth)	Yes — the app is the screen
Battery inside the probe?	No	No	Yes — must be charged
Good for	Quick checks, backup	Long smokes, several probes	Ovens, grills, rotisseries

GOOD TO KNOW

Pairs with your grills and smart-home guides

If you cook outdoors a lot, our **Smart Grills & Smokers** guide covers the cookers themselves. Our **Smart Home Installation** guide covers Wi-Fi, phones and apps around the house in general. This guide stays focused on the thermometer.

WHAT THIS DOES FOR YOU

What this does for you

Once you know the three kinds, the store shelf makes sense. You'll be able to tell at a glance which box suits the way *you* cook.

CHAPTER 3

Is a Smart Thermometer Right for You?

Smart thermometers are wonderful for some cooks and more than others need. Five minutes of thinking about how you cook will save you money.

Good reasons to own one

- **Holiday roasts and turkeys** — big, expensive cuts where guessing wrong is painful.
- **Low-and-slow smoking** — cooks that run many hours, where you'd rather not sit by the smoker.
- **Grilling with company** — you can talk with guests and let your phone tell you when to flip or pull.
- **Peace of mind about food safety**, especially when cooking for grandchildren, older relatives, or anyone whose health makes food poisoning more dangerous.
- **Moving around less.** Fewer trips to open a hot oven door or bend over the grill.

When a simple thermometer is enough

- You mostly cook thin foods — chops, burgers, fish fillets — that cook in minutes. A basic instant-read thermometer is faster and cheaper for these.
- You don't use a smartphone, or you'd rather not. Some wired models have their own screen, and Combustion's optional Display works without the phone (Chapter 7).
- You rarely cook meat at all. A small instant-read in the drawer covers the occasional chicken.

TIP

Already have a smart oven or grill?

Some ovens, air fryers and pellet grills come with a probe of their own that shows on their app. Try it first — you may not need a separate thermometer.

GOOD TO KNOW

What they cost

As of November 2026, plain instant-read thermometers are the least expensive option. A single wireless smart probe from the big brands runs from roughly $55 to about $140 depending on the model, and multi-probe or Wi-Fi kits run roughly $190 to $390. Chapters 5 to 7 give the specific models. Prices change with sales, so treat these as rough ranges.

WHAT THIS DOES FOR YOU

What this does for you

Knowing what you actually cook keeps you from buying a four-probe smoker kit when an inexpensive instant-read would do — or from struggling with a cheap thermometer at Thanksgiving when a smart one would make the day easier.

PART 2

Choosing a Thermometer

The three best-known brands, what each model's extra pieces do, how range really works, and how to buy without getting a fake.

CHAPTER 4

The Big Three Brands at a Glance

Dozens of companies make smart thermometers, but three names come up again and again: **MEATER**, **ThermoWorks** and **Combustion**. Each takes a slightly different approach. None is "the best" for everyone — it depends on how you cook.

	MEATER	ThermoWorks	Combustion
Probe style	Wireless	Wired (Signals, Smoke X) and wireless (RFX)	Wireless
How it talks	Bluetooth; some models have Wi-Fi built in	Wi-Fi, Bluetooth or long-range radio, by model	Bluetooth; Booster and Display extend it; Wi-Fi models available
App	MEATER	ThermoWorks	Combustion Inc.
Known for	Guided cooks and time estimates	Accuracy, wired multi-probe kits	Eight sensors and a "Ready-in" prediction

Questions that point you to the right one

1. **Where do you cook?** Indoors in the oven, any of them works. A smoker out back or a grill on a deck far from the house pushes you toward a model with a Wi-Fi bridge or long-range radio (Chapter 8).
2. **How many things at once?** A turkey and a ham, or two briskets, means two or more probes.
3. **Do you want a cable?** Wired probes don't need charging and handle long cooks well. Wireless probes are tidier and work in rotisseries, where a cable would wind up.
4. **Phone or no phone?** If you'd rather glance at a screen on the counter, look at models with their own display.

TIP

Write down your answers

Those four answers on a slip of paper are all a store clerk — or I — need to point you to the right box.

WHAT THIS DOES FOR YOU

What this does for you

Instead of comparing a dozen spec sheets, you narrow it to the two or three models that fit your kitchen.

CHAPTER 5

MEATER Models Explained

MEATER makes fully wireless probes that live in a wooden or plastic charger. The probe has a sensor for the meat near its tip and a sensor for the air temperature in its handle end. MEATER renames and regroups its models from time to time, so here is the lineup as of November 2026.

Model	What sets it apart
MEATER SE	The entry model. One probe with the same probe specs as the MEATER Plus, in a plastic charger instead of a bamboo one. $79.95 at MEATER's US store.
MEATER Plus	One probe; the bamboo charger has a built-in Bluetooth repeater. MEATER lists a range of up to 165 feet. $99.95 at MEATER's US store.
MEATER Pro	Formerly called the **MEATER 2 Plus**. A tougher probe rated for very high grill heat, and dishwasher-safe (the probe only, not the charger). $129.95 at MEATER's US store.
MEATER Pro Duo	Two Pro probes in a charger with Wi-Fi built in, so you can watch from anywhere. $199.95 at MEATER's US store.
MEATER Pro XL	Four Pro probes in a charger with Wi-Fi built in. $349.95 at MEATER's US store.
MEATER Block	An older four-probe set whose charger acts as a Bluetooth-to-Wi-Fi bridge. MEATER's US store still listed it at $239.95 when checked; some other stores have retired it.

The two temperature limits that matter

Every MEATER has two limits: how hot the **inside** of the probe may get (the part in the meat), and how hot the **handle end** may get (the part in the air). For the MEATER Pro, MEATER lists 221°F for the inside and 1000°F for the handle end. Older models are much lower — the MEATER Plus manual lists 212°F inside and 527°F outside. Chapter 24 explains how to stay inside those numbers.

HEADS UP

Older probes don't like open flame

MEATER says it doesn't recommend grilling over an open fire with the MEATER Plus, and points open-fire cooks to the Pro models instead. Treat the original MEATER and the SE the same way: keep them away from direct flames and flare-ups.

GOOD TO KNOW

"Renamed" doesn't mean "replaced"

If you own a MEATER 2 Plus, you own what MEATER now calls the MEATER Pro. Same probe, same app. Support articles for the "MEATER Pro" apply to you.

WHAT THIS DOES FOR YOU

What this does for you

Knowing which MEATER you have tells you how far you can walk away, how much heat it can take, and whether it can go in the dishwasher.

CHAPTER 6

ThermoWorks Models Explained

ThermoWorks makes the Thermapen instant-read thermometer. For long cooks it also makes base units with wired probes, plus a newer fully wireless system called RFX. All of its connected thermometers use one free app called **ThermoWorks**.

Signals — wired, with Wi-Fi and Bluetooth

Signals is a four-channel base unit. In the box are three high-temperature cooking probes and one air probe that clips to the grate to read the cooker's temperature. The base sits outside the grill or smoker and connects to your phone by Bluetooth nearby or by your home Wi-Fi from anywhere.

Smoke X — wired, with long-range radio

The **Smoke X4** is a long-range remote alarm thermometer: the base unit sits by the cooker and a separate handheld receiver goes with you. It uses its own radio rather than your phone, which some people prefer.

RFX — wireless probes and a gateway

RFX MEAT probes are wireless like a MEATER, but instead of Bluetooth they use a lower-frequency radio (433 MHz) that passes through a closed grill or smoker better. The probes talk to an **RFX GATEWAY** box, which joins your home Wi-Fi. ThermoWorks says the probe reaches up to 1,500 feet to the gateway in open line of sight; once the gateway is on Wi-Fi you can check from anywhere with internet.

Prices, as of November 2026

- RFX starter kits (gateway plus probes) vary by how many probes are included; ThermoWorks listed a four-probe kit at $389, often on sale for less.
- A single RFX MEAT probe: 99 dollars on ThermoWorks' site. The RFX GATEWAY alone: listed at 89 dollars, often on sale.
- Signals: around $299 at dealers; check ThermoWorks' own site for the current price.

TIP

Buy ThermoWorks direct or from a listed dealer

ThermoWorks says its technical support and warranty only cover products bought from ThermoWorks or its authorized dealers, and it has warned about counterfeit and "open-box" units sold as new. Chapter 27 covers this.

WHAT THIS DOES FOR YOU

What this does for you

ThermoWorks' wired kits never need the probe charged and handle many hours of smoking. Its RFX probes give you wireless convenience with a stronger signal out of a closed cooker.

CHAPTER 7

Combustion Explained

Combustion Inc. makes the **Predictive Thermometer**, a wireless probe with **eight** temperature sensors spread along its length. Instead of trusting one spot, it works out the coolest point inside the food — the true center — on its own. Its app then shows a "Ready-in" estimate of when your food will hit your target.

The pieces

Piece	What it does
Predictive Thermometer	The probe itself. The current (second-generation) probe is rated to 900°F and has a sealed, more durable body.
Range-Extending Booster	The charger. It also relays the probe's signal. Combustion says it can recharge the thermometer fully up to 8 times and keep it charged in standby for 6 months or more, and adds about 330 feet of range in ideal conditions.
Display	A small screen for the counter that shows core, surface and air temperature. With the Display, you can cook without the phone app at all.
WiFi Booster / WiFi Display	Newer Wi-Fi versions that connect the probe to your home Wi-Fi so you can check in from anywhere. Combustion lists up to 660 feet of total Bluetooth range for the WiFi Booster. Combustion says first-generation probes work with these Wi-Fi accessories too.

Prices, as of November 2026

- Thermometer with WiFi Booster: $189 on Combustion's site.
- Bundles with a WiFi Display, or with two thermometers, cost more; check Combustion's site for current prices.
- Retailers often bundle two thermometers with a display for more; prices swing with sales.

HEADS UP

Older probe? Check its heat limit

Combustion lists 900°F as the maximum for its second-generation probe, and says a higher heat limit was one of the main upgrades. If you have a first-generation probe, look up its limit in its guide before searing over a hot fire (Chapter 24).

WHAT THIS DOES FOR YOU

What this does for you

Eight sensors mean less fussing over exactly where the tip ended up. And with the Display, a family member without a smartphone can still see the temperature at a glance.

CHAPTER 8

How Range Really Works

The number on the box — 165 feet, 660 feet, 1,500 feet — is measured in the best possible conditions: open air, nothing in the way. Your kitchen and back yard are not open air. Here's what really happens to the signal.

What shortens the range

- **Metal.** An oven, a closed grill lid or a steel smoker wraps the probe in a metal box. This is the biggest range-killer of all.
- **Walls, brick and floors.** Each one between the cooker and your phone takes a bite out of the signal. A smoker in a detached garage may not reach the living room at all.
- **Your own body and pockets.** A phone in a back pocket, facing away, hears less.
- **Distance.** Bluetooth was designed for across-the-room, not across-the-property.

The three ways around it

Approach	How it helps
A repeater near the cooker	The charger or booster sits **outside** the grill, close by, with a clear path. It catches the probe's weak signal and resends it more strongly. MEATER Plus, MEATER Pro chargers and Combustion's Booster work this way.
A Wi-Fi bridge	A box (or a spare phone or tablet) near the cooker passes the readings onto your home Wi-Fi. Then any phone on your Wi-Fi — or anywhere on the internet — can see them. MEATER Block, Pro Duo, Pro XL, ThermoWorks' RFX GATEWAY and Signals, and Combustion's WiFi models do this.
A different radio	ThermoWorks RFX and Smoke X use their own longer-range radios instead of Bluetooth.

Getting the most from what you have

1. Set the charger, booster or gateway **outside** the cooker, a few feet away, raised up if you can — not on a metal shelf or tucked behind the grill.
2. Point its flat face toward the house if it has one.
3. Keep your phone within the listed range for the first few minutes, until you see the readings are steady.
4. Walk inside slowly and watch the app. Note where the signal drops — that's your real-world limit.

5. If it always drops at the same spot, that's a sign you'd benefit from a Wi-Fi bridge (Chapter 13).

TIP

Keep the booster off the metal

Combustion owners have found that lifting the Booster even a little off a metal table helps range. The same idea applies to any charger: give it air, not steel.

WHAT THIS DOES FOR YOU

What this does for you

Five minutes testing where the signal drops means no surprises during a long smoke — and you'll know whether to buy a bridge before you need one.

CHAPTER 9

Buying Smart: What to Check on the Box

Whichever brand you pick, a few minutes reading the box or the product page will tell you whether it fits your cooking.

The checklist

Check	Why it matters
Number of probes	One for a weeknight roast; two or more for a turkey and a ham, or two briskets.
Heat limit of the handle end	Matters for searing and grilling over flame. Look for the "ambient" or "external" maximum.
Heat limit inside	Usually around the boiling point of water. Fine for meat; not for frying oil.
Range and Wi-Fi	Do you need to check from the other end of the house, or from the store?
Probe thickness	Thin probes work better for chops, chicken breasts and fish.
Dishwasher-safe?	Some probes are; most wired probes are not (Chapter 22).
Phone requirements	Check that the app supports your phone's version of iOS or Android.
Warranty and seller	Buy from the maker or a listed dealer so the warranty counts (Chapter 27).

Where to buy

Buy from the maker's own website or a well-known store. MEATER sells through its own online store and through partners such as Traeger. ThermoWorks sells direct and through authorized dealers. Combustion sells on its own site and through retailers such as Big Green Egg dealers.

HEADS UP

On marketplace sites, look at the seller

On Amazon and similar sites, check who is actually selling and shipping the item. A listing from an unknown seller at a price far below the maker's own may be a counterfeit, a used unit, or one with no warranty.

WHAT THIS DOES FOR YOU

What this does for you

A one-minute check of the seller and the specs saves you from a probe that can't take your grill's heat, can't reach your recliner, or has no warranty when it fails.

PART 3

Setting Up

Unboxing, the first charge, installing the app, giving it the right permissions, pairing the probe, adding Wi-Fi, and setting alerts that really reach you.

CHAPTER 10

Unboxing and the First Charge

Before your first cook, give the probe a full charge on a calm day. You'll learn how the charger works, and you'll know the probe is ready when dinner depends on it.

What's usually in the box

- One or more **probes**, often with a thin plastic sleeve or film on them for shipping. Peel it off.
- A **charger** — a wooden or plastic dock (MEATER), a Booster (Combustion), or a base unit with cables (ThermoWorks Signals).
- On MEATER models, an **AAA battery** that powers the charger. It's usually included.
- A quick-start card. Keep it with the charger.

The first charge, step by step (MEATER)

1. Open the battery cover on the back of the charger.
2. Check that the AAA battery is in place. If there's a plastic shipping tab by the battery, pull it out. Close the cover.
3. Wipe the probe dry and set it in the charger slot, pointed end in first, the way the slot is shaped.
4. Leave it to charge. MEATER says the original MEATER, Plus and SE need about 2 hours before use; the MEATER Plus guide lists about 4 hours for the very first charge.
5. For a **MEATER Pro**, MEATER's store says a 15-minute charge is enough for about 12 hours. Even so, charge it fully before a long cook.

The first charge (Combustion and ThermoWorks)

- **Combustion:** charge the Booster with its USB cable, then drop the probe in. The Booster tops up the probe and holds its charge in standby.
- **ThermoWorks Signals and Smoke X:** the probes have no battery. Charge or power the **base unit** as its quick-start card shows.
- **ThermoWorks RFX:** the wireless probes charge in their own dock; follow the card in the box.

GOOD TO KNOW

A flashing red light on the charger

MEATER says a blinking red light on the charger means it can't make a Bluetooth connection to its probe. Chapter 25 explains the quick fix. To see how charged the probe itself is, look in the app.

TIP

Write down the date

Note when you put in a fresh AAA battery on the Cheat-Sheet in Chapter 29. MEATER's Plus guide lists about 100 charges, roughly a year, per AAA; MEATER says the Pro charger's AAA lasts about 2 years.

WHAT THIS DOES FOR YOU

What this does for you

A full charge on a quiet afternoon means the probe is ready the moment you need it — no scrambling at 4 p.m. on Thanksgiving.

CHAPTER 11

Installing the App and Its Permissions

Each brand has its own free app: **MEATER**, **ThermoWorks** or **Combustion Inc.** Download it from the App Store on an iPhone or iPad, or Google Play on an Android phone. Only download the app from those stores, and check the maker's name under the app before you tap **Get** or **Install**.

Why the app asks for permissions

When you open the app the first time, your phone will pop up several questions. These are normal, and saying **yes** to the right ones is what makes the thermometer work.

Permission	What it's for
Bluetooth	Lets the app hear the probe or charger. **Required.**
Nearby devices (Android 12 and later)	Android's name for permission to find Bluetooth gadgets. **Required** on newer Android phones.
Location (older Android)	On Android 11 and earlier, Android requires location permission to scan for Bluetooth devices. MEATER says you won't need it on Android 12 or later.
Notifications	Lets the app alert you when food is nearly done, or when the signal drops. **Say yes** — this is the whole point.
Local network / Wi-Fi (iPhone)	Lets the app find a Wi-Fi charger or bridge on your home network.

If you tapped "Don't allow" by mistake

Nothing is broken. You can change it in the phone's settings.

On an iPhone

1. Open **Settings** and scroll down to the app (for example, **MEATER**).
2. Tap it and turn on **Bluetooth**, **Notifications** and, if listed, **Local Network**.

On an Android phone

1. Open **Settings** > **Apps** > **MEATER** (or your brand's app) > **Permissions**.
2. Allow **Nearby devices** (or **Location** on older phones) and **Notifications**.
3. If you chose "Don't ask again," the app can't ask you a second time, so set the permission here by hand.

TIP

Make an account — it helps later

The apps let you create a free account with your email. You'll need one for remote monitoring over the internet, and it keeps your cook history if you change phones. Write the email you used on the Cheat-Sheet.

WHAT THIS DOES FOR YOU

What this does for you

Most "it won't connect" problems are really a permission that got turned off. Knowing where to look fixes them in a minute.

CHAPTER 12

Pairing the Probe with Your Phone

Pairing just means introducing the probe to the app so they recognize each other. You do it once; after that they find each other on their own.

The general steps (any brand)

1. Turn on your phone's **Bluetooth**.
2. Sit near the charger with the probe in it. Some probes wake up when you take them out of the charger; others when you put them in. The quick-start card says which.
3. Open the app. It usually finds the probe on its own, or shows a **+** or **Add device** button.
4. Tap the probe when it appears. If there are several, the app may ask you to pick each one.
5. Check that you now see a temperature — room temperature, around 70°F, is perfect.

HEADS UP

Don't pair in the phone's Bluetooth settings

With these thermometers, you pair **inside the brand's app**, not in the phone's Bluetooth menu. If the probe shows up in the phone's Bluetooth list, leave it alone there and use the app.

Naming your probes

If you have more than one probe, most apps let you name them or show a number or color. Match the name to something you'll remember — "turkey" and "ham," or "1" and "2" — and keep the same probe for the same job each time.

TIP

If it can't find the probe

Put the probe back in the charger and take it out again, move closer, turn Bluetooth off and on, and close and reopen the app. Chapter 25 has the full list.

WHAT THIS DOES FOR YOU

What this does for you

Once paired, the probe and app find each other every time — you just take the probe out and cook.

CHAPTER 13

Adding Wi-Fi: Bridges, Gateways and Remote Monitoring

Bluetooth alone keeps you within shouting distance of the cooker. Adding Wi-Fi lets you check from anywhere in the house — and, with a free account, from anywhere you have internet. How you add it depends on the brand.

MEATER: Link and Cloud

Feature	What it does
MEATER Link	Uses a **second** phone or tablet as a bridge. It stays near the cooker, hears the probe by Bluetooth, and passes readings to your home Wi-Fi so other phones in the house can see them. Both devices must be on the **same Wi-Fi** and signed into the app.
MEATER Cloud	Sends the readings over the internet so you can check from the store or a neighbor's house. Needs a MEATER account and either MEATER Link or a Wi-Fi charger.
Wi-Fi chargers	The **MEATER Block**, **Pro Duo** and **Pro XL** have Wi-Fi built in, so you don't need a spare phone as the bridge.

Turning on MEATER Link

1. Install the MEATER app on the spare phone or tablet and sign in with the **same** MEATER account.
2. Connect both devices to the same home Wi-Fi.
3. On an **iPhone or iPad**, MEATER says Link turns on automatically once both devices are signed in and on the same Wi-Fi.
4. On an **Android** device, turn on MEATER Link by hand in the app's settings.
5. Leave the bridge device near the cooker, plugged into its charger, with the app open.

ThermoWorks: Signals and the RFX GATEWAY

Signals and the RFX GATEWAY connect to your home Wi-Fi themselves. In the **ThermoWorks** app, add the device and follow the steps to choose your Wi-Fi network and type its password. After that, the app shows the readings anywhere you have internet.

Combustion: Booster, Display and Wi-Fi

The standard Booster and Display relay the probe's Bluetooth signal over a longer distance. The **WiFi Booster** and **WiFi Display** also put the readings on your home Wi-Fi. Combustion's help center has setup guides for each piece, and first-generation probes work with the Wi-Fi accessories too.

HEADS UP

VPNs and strict firewalls can block it

A VPN or a strict firewall is a common reason smart-kitchen gadgets can't reach the internet. If you use a VPN on your phone or router and remote monitoring won't work, that's the first thing to check.

WHAT THIS DOES FOR YOU

What this does for you

With Wi-Fi in the mix, you can sit in the recliner, run to the store, or nap during an all-day smoke and still see the temperature.

CHAPTER 14

Alerts That Actually Reach You

The best thermometer in the world doesn't help if the alert pops up on a phone in another room on silent. Ten minutes here can save a roast.

Set the target

Every app lets you set a **target temperature** — the internal temperature you want. The MEATER app offers two ways:

MEATER mode	What it does
Guided Cook	Pick the type of meat, the cut and how done you like it. The app sets the target, tells you when to **remove it from the heat**, then walks you through resting it.
Custom Cook	You type the target temperature yourself. MEATER says it doesn't estimate a rest time in this mode.

Add custom alerts

In the MEATER app, tap the **bell** icon on the cook screen to add alerts — for example, a reminder after a set time to baste or spritz, a warning shortly before the projected finish, or an alert at a certain temperature. ThermoWorks and Combustion apps have high and low alarms for food and cooker temperature too.

Make sure your phone lets alerts through

1. Check the app's **Notifications** are allowed (Chapter 11).
2. Turn the ringer volume up, and turn off silent mode while you cook.
3. If you use **Do Not Disturb** or a **Focus** mode, add the thermometer app to the list of apps allowed to break through.
4. Keep the phone charged — a long smoke can drain it. Plug it in while you wait.
5. If you have a smartwatch, check that the app's alerts reach it too.

TIP

Set a "nearly done" alert

Set an alert about 10°F below your target. It gives you time to get to the kitchen, find the oven mitts, and get the platter ready.

WHAT THIS DOES FOR YOU

What this does for you

Alerts that reach you mean you can relax with your guests and trust your phone to call you back to the kitchen at the right moment.

PART 4

Cooking with Your Thermometer

Where the probe goes and how deep, the government's safe temperatures, resting and carryover, and how to use your thermometer in the oven, on the grill and in the smoker.

CHAPTER 15

Where to Put the Probe, and How Deep

A thermometer reads the spot where its sensor sits, and nothing else. Put the tip in the wrong place and you get a perfectly accurate reading of the wrong thing. This is the single most important chapter in the guide.

The three rules

1. **Aim for the center of the thickest part.** That's the last place to get hot, so when it's done, the rest is too.
2. **Stay away from bone, fat and gristle.** Bone carries heat and reads hot; fat and gristle read differently from the meat around them.
3. **Go deep enough.** Every probe has a minimum depth. Too shallow, and the sensor reads the outside of the meat, or the probe itself can be damaged by the heat.

How deep for a MEATER

MEATER probes have a small **safety notch** on the metal part. MEATER says to push the probe in past that notch, but not all the way to the dark ceramic handle, which needs to stay in the air to read the oven or grill temperature.

1. Hold the probe against the outside of the meat first, to see where the tip will end up.
2. Find a spot where the notch will be fully inside and the tip lands in the center of the thickest part.
3. Push it in straight and smoothly. Don't let the tip come out the other side.
4. For a thin or small cut, MEATER suggests going about halfway between the notch and the handle, or inserting from the side.
5. If you can't get the probe past the notch at all, MEATER says not to cook with it in that food. Use an instant-read thermometer instead.

Other brands

- **Combustion:** the eight sensors find the coolest point for you, but the probe still needs to go in deep enough. Follow the depth shown in Combustion's quick-start guide.
- **ThermoWorks wired probes:** put the tip in the center of the thickest part, and route the cable so the lid or door doesn't pinch it.

- **Air probes:** clip the ThermoWorks air probe to the grate near the food, not touching it, so it reads the heat the food actually feels.

TIP

One probe, two spots

If you're not sure the probe is in the right place, check a second spot with an instant-read thermometer near the end of the cook. If the two agree, you can trust the reading.

WHAT THIS DOES FOR YOU

What this does for you

Good placement is the difference between a number you can trust and a number that fools you. Thirty seconds of care here makes every other feature in the app worth having.

CHAPTER 16

Safe Minimum Temperatures

The U.S. Department of Agriculture (USDA) publishes a short chart of the **safe minimum internal temperatures** for meat, poultry, fish and leftovers. "Minimum" means at least this hot, measured with a food thermometer. You may like some foods cooked more; you shouldn't serve them cooked less.

Food	Safe minimum	Rest time
Chicken, turkey, duck — whole, parts, ground	165°F	None required
Ground beef, pork, veal and lamb (burgers, meatloaf)	160°F	None required
Beef, pork, veal and lamb — steaks, roasts, chops	145°F	3 minutes
Fish and shellfish	145°F	None required
Egg dishes	160°F	None required
Leftovers and casseroles	165°F	None required
Stuffing (in the bird or in a dish)	165°F	None required

Things the chart teaches

- **Color isn't proof.** USDA says you can't tell whether meat is safely cooked by looking at it. Pink chicken can be safe and brown burgers can be undercooked. The thermometer is the only reliable test.
- **Whole cuts vs. ground meat.** A steak's germs are mostly on the outside; grinding mixes them all the way through. That's why ground beef needs 160°F but a steak is safe at 145°F.
- **Pork is 145°F now.** USDA lowered whole cuts of pork from 160°F to 145°F with a 3-minute rest in 2011. Ground pork is still 160°F.
- **Leftovers within 2 hours.** Get food into the refrigerator within two hours of cooking. Bacteria grow fastest between 40°F and 140°F.

STAY SAFE

When it matters most

Young children, pregnant women, adults over 65 and anyone with a weakened immune system get sicker from food poisoning. When you're cooking for them, don't round down. Use the chart, every time.

GOOD TO KNOW

"Doneness" isn't the same as "safe"

Apps offer settings like rare, medium-rare and medium. For steaks and roasts, rare and medium-rare are below USDA's 145°F. That's your choice to make for yourself, but the app's preset isn't a safety promise. For poultry and ground meat, stick to the chart.

TIP

Keep the chart handy

FoodSafety.gov has the full chart. The short version is on your Cheat-Sheet in Chapter 29.

WHAT THIS DOES FOR YOU

What this does for you

Six numbers on a card take the worry out of feeding family. You'll never again cut into a chicken breast to "check" it.

CHAPTER 17

Resting and Carryover Cooking

When you take meat off the heat, it keeps cooking for a while. The outside is hotter than the center, and that heat keeps moving inward. Cooks call this **carryover cooking**. A smart thermometer lets you watch it happen.

Why it matters

- **Big roasts keep rising.** The thicker the cut and the hotter the oven, the more the center climbs after you pull it.
- **Pull a little early for doneness.** If you like a roast at a certain temperature, many cooks take it out a few degrees before, and let the rest bring it up.
- **Never pull early for safety.** For poultry and ground meat, the food must actually reach the chart temperature. Don't count on carryover to get it there.

How the apps handle resting

Where	What happens
MEATER Guided Cook	Tells you when to **remove it from the heat**, then counts the rest and lets you know when it's ready to slice.
MEATER Custom Cook	MEATER says Custom Cook gives no resting-time estimate. Add a "falls below" alert instead (Chapter 14), so you know when the meat starts to cool.
Any app	Leave the probe **in** during the rest. You'll see the peak temperature and when it starts to drop.

The rest, step by step

1. When the app says to remove it, move the meat to a cutting board or platter. Leave the probe in.
2. Cover loosely with foil if you like. Don't wrap it tight, or the crust goes soft.
3. For beef, pork, veal and lamb steaks, roasts and chops, rest at least **3 minutes**. That's part of USDA's safety rule for those meats.
4. Watch the number climb, level off and begin to fall. Slice when it's ready.

TIP

The turkey rest is for quality

USDA has long suggested letting a whole turkey stand about 20 minutes before carving, so the juices settle. That's for a juicier bird; the safety part is reaching 165°F first.

WHAT THIS DOES FOR YOU

What this does for you

Understanding carryover means no more overcooked roasts. You'll pull the meat at the right moment and let the rest finish the job.

CHAPTER 18

The Holiday Turkey

For many families, the turkey is the one big cook of the year, and the one people worry about most. Here's how a smart thermometer helps, from the oven door to the carving board.

Where the probe goes

USDA says to check a whole bird in the **thickest part of the thigh**, without touching the bone. For extra confidence, it also suggests checking the thickest part of the breast and the innermost part of the wing with an instant-read thermometer. All of them should reach **165°F**.

1. Start with a fully thawed turkey. Pat it dry.
2. Hold the probe alongside the thigh first to see where the tip will land.
3. Push the probe into the thickest part of the thigh, angled toward the body, stopping short of the bone.
4. With a wireless probe, make sure the handle end sticks out into the oven air, not buried in the bird or touching the pan.
5. If you have two probes, put the second in the thickest part of the breast.
6. Start your cook in the app and set the target to 165°F, or use the app's guided turkey setting.
7. When it's done, check the breast and wing with an instant-read too, then let the bird stand before carving.

If you stuff the bird

USDA says the stuffing must reach **165°F** too, measured in its center. If the turkey is done but the stuffing isn't, keep cooking until it is. For the best safety and more even cooking, USDA suggests cooking the stuffing separately in a dish.

STAY SAFE

Don't take the stuffing out early

USDA warns against scooping stuffing out of the bird before it reaches 165°F, because undercooked stuffing can spread germs to the cooked meat.

TIP

A practice run in October

Try your thermometer on a whole chicken a few weeks before the holiday. You'll learn the app, the alerts and the range in your own kitchen, with nothing riding on it.

WHAT THIS DOES FOR YOU

What this does for you

A probe in the thigh and an alert on your phone means you can visit with family while the turkey cooks, instead of opening the oven every twenty minutes.

CHAPTER 19

Roasts and Everyday Oven Cooking

The oven is the easiest place to use a smart thermometer. The heat is steady and the food sits still. The only real challenge is the metal box around it, which shortens the signal (Chapter 8).

A weeknight roast, step by step

1. Charge the probe and keep the charger, booster or gateway on the counter near the oven, not on top of it where it gets hot.
2. Insert the probe into the center of the thickest part (Chapter 15).
3. Start the cook in the app before the meat goes in, and set your target or choose a guided cook.
4. Put the pan in the oven. Check the app shows both temperatures — inside and oven air.
5. Close the door, then walk to where you'll wait and make sure the reading still updates.
6. When the alert comes, take it out, rest it (Chapter 17), and slice.

Wired probes in the oven

With a wired probe, run the cable out through the side of the door, where the seal is, and keep the base unit off the hot stovetop. Don't let the cable touch a heating element or the broiler.

HEADS UP

Not in the microwave

Metal probes, wired or wireless, should never go in a microwave oven. If your microwave or combination oven has its own special probe, use only that one, as its manual says.

TIP

Cooking in a smart oven or air fryer?

Many have a built-in probe of their own. Our **Air Fryers, Instant Pots & Smart Cookers** guide covers those.

WHAT THIS DOES FOR YOU

What this does for you

With the oven doing the work and the phone keeping watch, a Sunday roast becomes one of the easiest meals of the week.

CHAPTER 20

On the Grill: Searing, Flare-Ups and Two-Zone Cooking

Grills are where smart thermometers save the most guesswork, and where they get hurt the most. A grill can be far hotter than an oven, and flames can reach the probe directly.

Before you light it

- Know your probe's limit for the handle end (Chapter 24). An older MEATER, for example, isn't meant for open flame; the Pro models are.
- Set up **two zones** if you can: one side hot for searing, one side cooler for gentle cooking. Put the probed food on the cooler side most of the time.
- Put the charger, booster or gateway on a table near the grill, not on the grill's side shelf above the burners or the firebox.

Cooking with the lid closed

A closed metal lid blocks the signal more than anything else. If the app keeps dropping, move the repeater closer to the grill and raise it up. MEATER says the probe may be losing the charger, not your phone, so the charger needs to stay as close to the probe as possible.

When to pull it

1. Insert the probe before the food goes on, from the side for steaks and chops.
2. Sear over the hot side with the lid open, watching for flames on the probe's handle.
3. Move the food to the cooler side, close the lid and let the app watch the temperature.
4. When the alert comes, take it off with tongs. Use oven mitts to pull the probe — it will be hot.

STAY SAFE

Hot probes and hot grills

A probe straight off the grill can burn your fingers. Pull it with a mitt or a folded towel, and lay it on a heat-safe surface to cool before it goes back in the charger.

WHAT THIS DOES FOR YOU

What this does for you

You can stand back from the grill, talk with your guests, and still serve chicken that's safe and steak that's done the way you like it.

CHAPTER 21

Low-and-Slow: Smokers and Long Cooks

Smoking a brisket or a pork shoulder can take many hours. This is where a smart thermometer, and especially a Wi-Fi bridge, really earns its keep: you don't need to sit by the smoker all day.

Before a long cook

1. Charge everything fully the night before: the probe, the charger or booster, and your phone.
2. For a wired system, check the base unit's batteries or power and plug it in if you can.
3. Test the Wi-Fi bridge or gateway at the smoker's spot. A smoker at the far end of the yard may need the bridge closer to the house, or a better Wi-Fi signal outside (Chapter 13).
4. Use the air probe or the probe's ambient reading to watch the smoker's temperature as well as the meat's.
5. Set alerts for when the smoker runs too hot or too cold, and for when the meat nears its target.

The long pause in the middle

On large cuts, the temperature often stops climbing for a long time partway through a smoke, then starts rising again. Smokers call this the **stall**. It's normal. The app's finish-time estimate may jump around while it happens. Be patient and trust the number, not the clock.

HEADS UP

Prediction is a guess

Finish-time estimates get better as the cook goes on, but they're never a promise. Plan a cushion of time before dinner, especially for a first smoke.

GOOD TO KNOW

Pairs with your grills guide

Our **Smart Grills & Smokers** guide covers the smokers and pellet grills themselves, including their apps.

WHAT THIS DOES FOR YOU

What this does for you

With alerts for the smoker and the meat, you can run errands, rest, or watch the game, and your phone will tell you if anything needs attention.

PART 5

Care, Charging and Safety

Cleaning without ruining the probe, keeping it charged and ready, and the heat limits that protect it.

CHAPTER 22

Cleaning Your Probe

A probe has touched raw meat, so it needs cleaning after every cook. But a wireless probe has a battery and a radio inside, so how you clean it matters. The answer depends on your model.

Which probes can go in the dishwasher

Probe	Dishwasher?
MEATER Pro, Pro Duo, Pro XL	MEATER says the **probe only** is waterproof and dishwasher-safe. The charger is not.
Original MEATER, MEATER Plus, MEATER SE	**Not** dishwasher-safe. MEATER says these probes are water-resistant, not waterproof. Wash by hand.
ThermoWorks wired probes	Wash the metal probe by hand. Keep the cable and the plug end out of water, and check your model's guide.
Combustion, ThermoWorks RFX	Follow the care section of your model's guide before trying the dishwasher.

Washing by hand, step by step

1. Let the probe cool completely.
2. Wash it under warm running water with a little dish soap and a soft sponge.
3. Scrub gently along the metal to remove grease and smoke film, especially near the end that sits in the charger.
4. Don't leave it soaking in the sink.
5. Rinse and dry it **completely** with a clean towel.
6. Only then put it back in the charger. MEATER says the probe must be fully dry before it goes back in the dock.

HEADS UP

Grease stops charging

MEATER says a film of grease or smoke on the probe can keep it from touching the charger's contacts properly. If a probe suddenly won't charge, a good scrub is the first fix.

STAY SAFE

Raw meat on the probe

Treat a used probe like a knife that cut raw chicken. Don't set it on a clean plate or use it to check cooked food until it's been washed.

WHAT THIS DOES FOR YOU

What this does for you

Two minutes at the sink after each cook keeps the probe safe to use, charging properly, and lasting for years.

CHAPTER 23

Charging, Batteries and Storage

A wireless probe is only useful if it's charged. Here's how to keep it ready without thinking about it.

What powers what

Part	Power
MEATER probes	A tiny rechargeable battery inside the probe, charged by sitting in the charger.
MEATER chargers	Most run on one **AAA** battery. MEATER's Plus guide lists about 100 charges, roughly a year, per battery; MEATER says the Pro charger's battery lasts about 2 years.
Combustion Booster	A rechargeable battery charged by USB. Combustion says it can refill the thermometer fully up to 8 times and keep it charged in standby for 6 months or more.
ThermoWorks wired units	The probes have no battery; the base unit does. Check your model's guide for its battery or charging cable.

Habits that keep it ready

1. Wash, dry and put the probe **back in its charger** after every cook.
2. Keep a spare AAA battery in the drawer for a MEATER charger.
3. Look at the probe's battery level in the app the day before a big cook.
4. If you forgot, a short charge helps. MEATER says 15 minutes in the charger gives a MEATER Pro about 12 hours of cooking.
5. Store the charger in a cool, dry drawer or cupboard, away from the stove's heat.

HEADS UP

Don't dock the probe mid-cook

MEATER says putting the probe back in the charger while a cook is running breaks the Bluetooth connection and sets off a "Connection Lost" alert. If you see that alert, that may be why.

TIP

Old AAA, weak signal

If a MEATER charger has been in a drawer for a long time and the probe won't charge, try a fresh AAA battery before anything else.

WHAT THIS DOES FOR YOU

What this does for you

Back in the charger after every wash means the probe is always ready — including on the day you decide at the last minute to grill.

CHAPTER 24

Heat Limits and Probe Safety

Every probe has two temperature limits: one for the part **inside** the food and one for the part in the **air**. Go past either one and you can damage the probe for good. Here are the numbers the makers publish.

Probe	Inside the food (max)	Handle end / air (max)
MEATER Pro, Pro Duo, Pro XL	221°F	1000°F
MEATER Plus (and SE, same probe)	212°F	527°F
Combustion, second generation	—	900°F
ThermoWorks Pro-Series high-temp cable	—	700°F (cable)

Why the inside limit is low

The inside limit is around the boiling point of water. Meat never gets that hot inside, so this is fine for cooking. But it means a probe should never go in **frying oil**, a **pot of boiling liquid** beyond its rating, or a **self-cleaning oven** cycle.

Staying inside the limits

- Keep the handle end out of direct flames and away from the coals, especially with older probes.
- Insert the probe **past its minimum depth** so the inside part is protected by the meat (Chapter 15).
- Watch the ambient reading in the app. If the air temperature climbs toward the limit, move the food to the cooler side or lower the heat.
- With wired probes, keep the cable away from flames and heating elements, and don't pinch it in a door.
- Don't use a probe in the microwave, or in an oven's self-clean cycle.

STAY SAFE

If the probe looks damaged

A cracked handle, a bent tip, or a probe that gives odd readings after a flare-up shouldn't be trusted. Check the food with an instant-read thermometer and contact the maker about a replacement.

WHAT THIS DOES FOR YOU

What this does for you

A probe treated within its limits lasts for years. Knowing the numbers before you sear saves you the cost of a new one.

PART 6

When Things Go Wrong

What to do when the app loses the probe, how to check your thermometer is accurate, and how to avoid fakes and scams.

CHAPTER 25

When the App Loses the Probe

Sooner or later, the numbers will stop updating or the app will say the connection was lost. It's almost always the signal, not a broken probe. Work down this list in order.

First: is the food safe?

While you sort out the connection, the food keeps cooking. If you're near the end of the cook, check it with an instant-read thermometer (Chapter 26). Never assume food is done just because the app went quiet.

Fixes to try, in order

1. **Move the charger, booster or gateway closer** to the cooker. MEATER says the probe may be losing the charger, not your phone.
2. **Walk your phone closer** and wait a minute for the app to catch up.
3. **Check the probe wasn't put back in the charger.** MEATER says that interrupts the connection and triggers a "Connection Lost" alert.
4. **Close and reopen the app.**
5. **Turn your phone's Bluetooth off and on.**
6. **Disconnect other Bluetooth gadgets.** MEATER says some phones struggle when they're connected to many Bluetooth accessories at once. Restart the phone.
7. **Check the permissions** (Chapter 11): Bluetooth, Nearby devices or Location, and Notifications.
8. **Clean the probe** if it hasn't been charging well (Chapter 22).

If the MEATER charger flashes red

MEATER says a blinking red light means the charger can't make a Bluetooth connection to its probe. The fix it gives: turn off Bluetooth on your phone or tablet, put the probe in the charger, and take it back out. Then turn Bluetooth back on.

Remote monitoring stopped working

- Check that the bridge phone, charger or gateway is still on your home Wi-Fi and plugged in.
- If you use a VPN, try turning it off.
- Check you're signed in to the **same account** on every phone.
- Restart your home router if other devices are having trouble too.

HEADS UP

Resets are a last resort

MEATER's support site offers reset options, but MEATER says to use them only after trying all the other troubleshooting steps. Resetting can mean pairing everything again.

WHAT THIS DOES FOR YOU

What this does for you

With this list on the counter, a dropped connection is a two-minute fix instead of a ruined dinner.

CHAPTER 26

Your Backup: An Instant-Read and an Ice-Water Test

I recommend keeping a plain instant-read thermometer in the kitchen drawer, even with a smart probe. It's the quick second opinion, and the backup when a battery dies or the app won't connect. It's also how you check that any thermometer is telling the truth.

Why a backup earns its spot

- **Second spot.** Check the turkey's breast and wing while the smart probe watches the thigh.
- **Thin foods.** Burgers, chops and fish fillets are often too thin for a wireless probe's depth.
- **Dead battery or lost signal.** You can still finish the cook safely.
- **Leftovers.** Check reheated food reaches 165°F.

The ice-water test

Ice melting in water stays at exactly **32°F**. That makes a properly made ice bath the simplest way to check a thermometer. ThermoWorks describes it this way:

1. Fill a tall glass to the top with **crushed ice**, or small cubes, packed tight.
2. Add cold water just to fill the gaps. The ice should not float.
3. Stir it and wait a minute.
4. Put the probe into the center of the ice, not touching the sides or bottom of the glass.
5. Wait for the reading to settle. It should read 32°F, within the accuracy your maker lists.

HEADS UP

A few cubes floating isn't a test

ThermoWorks says a glass of water with a few ice cubes floating in it can read as much as 12°F warmer than a real ice bath. Pack the glass with ice.

TIP

What if it's off?

Look up your model's stated accuracy before deciding. If it reads well outside that, contact the maker. Some instant-reads can be adjusted; most smart probes can't, so the maker's support is the next step.

WHAT THIS DOES FOR YOU

What this does for you

A five-minute ice test, once or twice a year, means you never have to wonder whether your thermometer is the reason the roast came out wrong.

CHAPTER 27

Fakes, Scams and Buying Safely

Popular kitchen gadgets attract copycats and fake deals. A little care when you buy protects your money and your warranty.

Counterfeits and unauthorized sellers

ThermoWorks says its warranty and technical support cover only products bought from ThermoWorks or its authorized dealers. It has warned about counterfeit and copycat units, and "open-box" units sold as new, from unauthorized sellers. Most ThermoWorks instruments carry a two-year warranty, and terms run from 6 months to 5 years depending on the product.

How to buy safely

1. Buy from the maker's own website, or a well-known store you already trust.
2. On marketplace sites, check who is **selling** and **shipping** the item, not just the brand name in the listing.
3. Be wary of prices far below the maker's own store, especially from sellers you've never heard of.
4. Keep the receipt and the box, and register the product if the maker offers it.
5. Pay with a credit card, which gives you more protection than a debit card, wire, gift card or app payment.

SCAM ALERT

"90 percent off" thermometer ads

Ads on social media for a famous-brand thermometer at a tiny fraction of its price, from a website you've never heard of, are a common trap. You may get a cheap copy, or nothing at all. If you've already paid, call your card company right away and report it at reportfraud.ftc.gov.

SCAM ALERT

Fake "support" phone numbers

If an app stops working, get help only from the maker's own website or the app itself. Phone numbers in search ads or pop-ups may belong to scammers who ask to control your computer or want payment in gift cards. No real support line asks for gift cards.

HEADS UP

Apps from the store only

Download the thermometer app only from the App Store or Google Play, and check that the developer's name matches the brand (Chapter 11). Never install an app from a link in a text or email.

WHAT THIS DOES FOR YOU

What this does for you

Buying from the right place means a real product, a real warranty, and real help if it ever fails.

PART 7

When to Call Bill & Your Cheat-Sheet

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

CHAPTER 28

When to Call Bill

I've written this guide so you can set up and use a smart thermometer on your own. But part of being helpful is being honest about when a hand saves time and worry. Here's my straight advice, with no pressure.

Times it's well worth a call

- **Before you buy** — talking through how you cook and which model fits, so you don't overspend (Chapter 4 and Chapter 9).
- **Setting up the app**, the permissions, your account and alerts that really reach you (Chapter 11 and Chapter 14).
- **Getting Wi-Fi to reach the grill or smoker** — a bridge, a gateway, or better Wi-Fi outside (Chapter 13).
- **A connection that keeps dropping** even after the steps in Chapter 25.
- **Setting up a smartwatch or smart speaker** to show your cook.
- **A practice run before a holiday**, so the big day goes smoothly.
- **You'd simply rather have a patient person handle it.** That's always a good enough reason.

What working with me is like

I work at your pace — no rushing, no talking down, no jargon. I explain what I'm doing in plain words, and I'll always tell you honestly when something isn't worth the money. Home visits are here in Portage County, Ohio; remote help reaches you wherever you are. I've been doing this work for more than 30 years. I'm a technology helper, not a chef, so for recipes I'll point you to the app's guided cooks.

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 free to read and share with family and neighbors.

GOOD TO KNOW

You may be greeted by Sophie

When you call or visit billshometech.com, you might first meet **Sophie**, my AI receptionist. She can answer quick questions and help you book a time. The actual help always comes from me.

Thank you for taking the time to learn your thermometer. Here's to many good meals, cooked safely, with more time at the table and less at the oven door.

— Bill

CHAPTER 29

Your Smart Thermometer Cheat-Sheet

Keep a copy of this in the kitchen drawer with your thermometer. The whole guide, boiled down.

Safe minimum temperatures (USDA)

Food	At least
Poultry — whole, parts, ground	**165°F**
Ground beef, pork, veal, lamb	**160°F**
Steaks, roasts, chops (beef, pork, veal, lamb)	**145°F** + 3-minute rest
Fish and shellfish	**145°F**
Egg dishes	**160°F**
Leftovers, casseroles, stuffing	**165°F**

The essentials

Remember	
Where	Center of the thickest part. Away from bone, fat and gristle.
How deep	Past the probe's minimum mark; handle end out in the air.
Signal	Charger, booster or gateway **outside** the cooker, close by, off metal.
Rest	Leave the probe in while it rests. Never pull early for safety.
Cleaning	Pro-style probes: dishwasher OK (probe only). Older MEATERs: hand wash, dry fully.
Heat	Know your probe's air limit. Keep older probes away from flames.
Backup	Instant-read in the drawer. Ice bath reads 32°F.

Write it down once

Keep handy	
Brand and model	_____
Number of probes / names or colors	_____
App account email	_____
Probe's air (ambient) heat limit	_____ °F
Date of last charger battery change	_____
Where the signal drops in my yard	_____
Date of last ice-water test / reading	_____ / _____ °F
Maker's support (phone or website)	_____
Bought from (store) and date	_____

When something's wrong, in order

1. Food safety first: check it with an instant-read thermometer.
2. Move the charger, booster or gateway closer to the cooker; walk your phone closer.
3. Make sure the probe wasn't put back in the charger mid-cook.
4. Close and reopen the app; turn Bluetooth off and on.
5. Check the app's permissions: Bluetooth, Nearby devices or Location, Notifications.
6. Won't charge? Clean the probe, dry it, and try a fresh charger battery.
7. Still stuck? Call me at **(330) 200-8042** or book at **billshometech.com/book**.