



An Extended Guide · No. 1987

Coin & Button Batteries — Key Fobs, Trackers, Remotes & Finding the Right Size

How to read the code, match the exact size, and replace one safely

Tech Made Simple — Service Made Personal

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! If a button battery is swallowed, it is an emergency — act now

A swallowed coin or button battery can burn through the throat in as little as two hours, so do not wait to see what happens. Call the Poison Control hotline right away, day or night, at 1-800-222-1222 — it is free and staffed around the clock — or call 911. If the child is at least 12 months old, can swallow, and it has been under 12 hours, give two teaspoons of honey every 10 minutes (up to six times) on the way to the emergency room. Do NOT make the child throw up and do NOT give anything else to eat or drink. Get to the emergency room for an X-ray even if the child seems fine.

Let's find the right little battery together

If you have ever popped open a key fob or a thin remote, found a flat silver disc inside, and wondered what on earth to ask for at the store — you are in very good company. This guide helps you read the code on a coin cell and match it exactly, calmly and without the jargon.

I'm Bill, and I run Bill's Home Tech here in Portage County, Ohio. I've spent 30+ years helping folks get comfortable with the gear in their homes, patiently and in plain language. These little batteries have a code stamped right on them, and once you know how to read it, buying the right one is easy.

I've put the safety note first on purpose. These batteries are small, shiny, and genuinely dangerous if a child swallows one, so before we talk sizes, please read that box at the top. We cover the whole subject in our button-battery safety guide.

★ You don't need to memorize a thing

By the end of this you'll be able to read the code on any coin cell and match it. If you'd rather just have a second pair of eyes, bring me the old battery or send a photo — call or text (330) 200-8042 and I'll tell you the size, free.

The whole guide, on one page

If you remember only these things, you're already most of the way to buying the right coin cell.

- ❑ The code is printed on the flat side — read it there, like CR2032.
- ❑ **The letters are the chemistry** (CR is lithium, LR is alkaline).
- ❑ **The first two numbers are the width** across, in millimeters.
- ❑ **The last two numbers are the thickness**, in tenths of a millimeter.
- ❑ **Match the exact code** — a cell that looks close but is thinner or thicker won't sit right or make good contact.
- ❑ **CR2032 is the most common** coin cell in the house, by a mile.
- ❑ Bring the old cell, or its code, when you buy — no guessing.

! Keep them away from little ones

Coin batteries are dangerous if swallowed. Store new and used ones up high and out of reach, and see our button-battery safety guide for the full story and the emergency steps.

What a coin cell actually is

Let's start with what you're holding, because the name tells you most of it.

A coin cell — also called a button battery — is a flat, round, silver disc, about the size of a coin, with a smooth top and bottom. One face is the plus side (the wider, flatter one, usually marked with a +), and the rim and other face are the minus side. They power small, low-drain gadgets that don't need much but need it for a long time.

You'll meet them in car key fobs, thin remotes, item trackers, bathroom scales, watches, and musical greeting cards. They come in a handful of standard sizes, and every one has its size stamped right on the flat side — that code is the key to the whole thing.

✓ Coin and button mean the same thing here

You'll hear both words. 'Coin cell' usually means the bigger, flatter lithium ones like CR2032; 'button' sometimes means the tinier ones in watches and hearing aids. For buying the right size, the code is what matters, whatever you call it.

How to read the code on a coin cell

This is the heart of the guide, and it's simpler than it looks. Take a code like CR2032 and read it in three little pieces.

The letters come first — they tell you the chemistry. CR means a lithium cell (the common 3-volt kind). LR means an alkaline cell (a lower 1.5-volt kind, like the LR44 in some small gadgets). The letters matter: a lithium cell and an alkaline cell the same size are not always interchangeable, so match the letters too.

The first two numbers are the diameter — how wide the disc is, across, in millimeters. So the 20 in CR2032 means it is 20 millimeters across, a bit smaller than a nickel. **The last two numbers are the height — how thick it is, in tenths of a millimeter.** The 32 means 3.2 millimeters thick.

Put it together and CR2032 reads as: a lithium cell, 20 millimeters across, 3.2 millimeters thick. CR2025 is the same width but thinner (2.5 mm), and CR2016 is thinner still (1.6 mm). Same width, different thickness — which is exactly why they aren't swaps for each other.

✓ A magnifier for the tiny print

That code is small. Open your phone's camera, point it at the flat side, and pinch to zoom — the letters and numbers jump right out, no reading glasses needed. Jot the code on a slip of paper before you head to the store.

The common sizes you'll actually meet

There are many coin-cell sizes in the world, but a short list covers almost everything in a normal home.

Code	Size	Often found in
CR2032	20 mm, 3.2 thick	Key fobs, remotes, scales
CR2025	20 mm, 2.5 thick	Fobs, car remotes, cards
CR2016	20 mm, 1.6 thick	Thin remotes, small keys
CR1632	16 mm, 3.2 thick	Trackers, some fobs
CR123A	Larger cylinder	Cameras, some sensors
LR44	Small, 1.5 volt	Toys, lights, thermometers

Notice how many start with CR20 — that's the 20-millimeter family, the most common by far, and the three in it (2032, 2025, 2016) differ only in thickness. That one detail trips up more people than anything else, so it's worth a close look at the last two digits.

★ **Not sure which family yours is in?**

Bring me the gadget or the old battery and I'll read the code with you and write it down. Nine times out of ten it's a CR2032 — but it's the tenth time that's worth checking. Call (330) 200-8042.

Where each size tends to turn up

Knowing the usual homes for each size helps you guess well — though you should always confirm with the printed code.

- **CR2032:** the workhorse — car key fobs, TV and fan remotes, bathroom and kitchen scales, computer clocks, many trackers.
- **CR2025 and CR2016:** the thinner cousins, in slimmer fobs, thin remotes, and musical or light-up greeting cards.
- **CR1632:** a narrower cell, common in some item trackers and compact key fobs where space is tight.
- **LR44 (and look-alikes):** the little alkaline button in some toys, laser pointers, small flashlights, and thermometers.
- **CR123A:** a chunkier lithium cell — not a flat coin — used in some cameras, smoke or security sensors, and flashlights.

✓ The gadget often tells you, too

Many fobs and remotes have the battery size printed inside the compartment, or in the little manual. If the old cell's print has rubbed off, check there before you guess.

Why 'close enough' isn't good enough

This is the mistake I most want to save you from. With coin cells, a near-match is a non-match.

Say your fob takes a CR2032 and you have a CR2025 in the drawer. They are the same width, so it may drop into the holder — but it's thinner, so it can sit loose and lose contact, and it holds a little less charge. The gadget may work poorly, flicker, or not wake up at all. It isn't broken; it's just the wrong cell.

Go the other way — a thicker cell where a thin one belongs — and it may not fit under the clip at all, or it can strain the little contacts forcing it in. The width has to match so it seats, and the thickness has to match so it makes firm contact. That's why we read all four numbers.

! Don't force a cell that doesn't fit

If a coin cell won't sit flat and let the cover close easily, it's the wrong size — don't press or bend it in. Forcing it can damage the little spring contacts, and a stressed cell is one more thing you don't want around the house.

Two kinds of households, two sets of needs

Replacing a coin cell feels a little different depending on the gadget. The code-reading is the same; the fussing is what changes.

If you're replacing a key-fob or remote cell

You just want the fob or remote working again. The cell is easy to reach once you know the size and how the case opens.

- Read the code on the old cell first, or check inside the compartment.
- Match it exactly — letters and all four numbers.
- Note which way the plus (+) side faced before you lift the old one out.
- Snap the case fully shut so the cell can't rattle loose.

If you're keeping trackers and small gadgets going

Item trackers, thin scales, and tiny gadgets sip power for months, then go quiet. Your goal is a clean, reliable swap that actually wakes them up.

- Keep a couple of the right size on hand so a dead tracker isn't a hunt.
- Wipe the new cell and the contacts with a dry cloth before fitting it.
- If a fresh, correct cell won't wake a tracker, read about coated cells a few pages on.
- Store spares high and sealed — never loose in a dish where a child could reach.

★ Not sure what your gadget takes?

This is a perfect quick job. Bring me the fob, remote, or tracker and I'll read the code, fit the right cell the right way round, and make sure it closes up snug — in one calm sitting. Call (330) 200-8042.

Why a brand-new cell sometimes won't wake a tracker

Here's a puzzling one that catches people out: you fit a fresh, correct CR2032 into an item tracker, and nothing happens. Often there's a simple reason, and it isn't a bad battery.

To help keep children safe, some makers now add a bitter coating to CR2032 coin cells, so a child who gets one in their mouth spits it out. That's a genuinely good thing. But the coating is applied to the battery's surface, and in a few very low-power gadgets — item trackers especially — it can get between the cell and the metal contacts and interfere with the connection.

The result is a tracker that stays dark with a battery that's perfectly good. If you hit this, the fix is to use an uncoated CR2032 in that one device — the same size and code, just without the bitter coating. It's the one place I'd steer you to an uncoated cell on purpose.

! Uncoated means extra care around children

An uncoated cell is the right call for a stubborn tracker, but it loses that bitter child-safety layer — so be extra careful to store spares high and keep the tracker's cover shut tight. See our button-battery safety guide.

Buying the right one without the runaround

Once you have the code, buying is quick. A couple of habits keep you from coming home with the wrong thing.

Best of all, take the old cell with you, or a photo of its flat side, or the code written on a slip of paper. Hand that to the clerk or type it into the search box and you'll land on the exact match. The code is a worldwide standard, so a CR2032 from any reputable maker is a CR2032.

Buy from a seller you'd trust for anything else, and check the little date on the package — coin cells last for years on the shelf, but fresher is better. A multipack is fine and usually a better value, as long as you store the spares safely up high.

★ Text me the code before you buy

Snap a photo of the old cell or the inside of the compartment and send it over. I'll confirm the exact size so you order once and it just works — no commission, just a straight answer. Call or text (330) 200-8042.

Swapping a coin cell, step by step

The swap itself is a two-minute job. Going slowly and in order keeps it tidy and keeps the little battery where it belongs.

- ❑ Work over a clear table, away from children and pets, with a small dish for the old cell.
- ❑ Open the compartment — some need a coin twist, a small screwdriver, or a gentle slide.
- ❑ Note which way the plus (+) side faces before you lift the old cell out. A quick photo helps.
- ❑ Handle the new cell by its edges, wipe both faces with a dry cloth, and set it in the same way round.
- ❑ Close the cover until it clicks, then test the gadget.
- ❑ Put the old cell straight up and away for recycling — never loose in a drawer.

✓ Fingerprints can cause a weak connection

The oils from your fingers can leave a film on a coin cell's faces. A quick wipe with a dry cloth, holding the cell by its edges, gives you a clean, firm contact and one less reason for a gadget to act up.

The safety part, said plainly

I won't bury this. Coin and button batteries are genuinely dangerous to small children, and a minute of care prevents a terrible day.

A swallowed coin battery can burn through the throat in as little as two hours, and a child may show no sign at first. That's why both new and used cells belong up high, sealed, and out of reach — never loose in a junk drawer or a dish, and never within a toddler's grasp. A used cell is still dangerous; 'dead' does not mean harmless.

When you change a coin cell, do it away from little ones, and put the old one somewhere safe the instant it comes out. If grandkids visit, our button-battery safety guide walks your whole home room by room and covers the exact emergency steps to post on your fridge.

! If a button battery is swallowed, it is an emergency — act now

A swallowed coin or button battery can burn through the throat in as little as two hours, so do not wait to see what happens. Call the Poison Control hotline right away, day or night, at 1-800-222-1222 — it is free and staffed around the clock — or call 911. If the child is at least 12 months old, can swallow, and it has been under 12 hours, give two teaspoons of honey every 10 minutes (up to six times) on the way to the emergency room. Do NOT make the child throw up and do NOT give anything else to eat or drink. Get to the emergency room for an X-ray even if the child seems fine.

Storing spares and tossing dead ones safely

Loose coin cells — new and spent alike — are the highest risk in the house. Both deserve a safe home out of reach.

Keep new coin cells in their original sealed card, in a high, closed spot — not a low drawer and not loose in a dish. The sealed card also keeps them from touching coins or keys, which can short a loose cell and wear it down or warm it up.

A used coin cell still holds enough charge to injure a child, so treat dead ones with the same care. Put a piece of tape over each spent cell and take them to a battery-recycling drop-off, or follow your local rules. Taping the cell keeps it from contacting others in the recycling bin.

! Dead does not mean harmless

People assume a 'dead' coin battery is safe to toss in a drawer or an open trash can — it isn't. A used one can still cause a serious burn if swallowed. Tape it, store it high, and recycle it.

CR or LR — why the letters matter

Most coin cells you'll meet are CR, but you'll run into LR too, and the letters aren't just decoration.

CR is a lithium cell, and it puts out about 3 volts. These are the flat silver discs in fobs, remotes, and trackers — CR2032 and its family. **LR** is an alkaline cell at about 1.5 volts, like the LR44 you find in some toys, lights, and thermometers, often stacked a few at a time.

Because the voltage differs, a CR and an LR of similar size are not safe swaps — the gadget was built for one or the other. So when you read the code, read the letters as carefully as the numbers, and match both. When in doubt, the old cell in your hand is the surest guide.

✓ Silver-oxide watch cells are their own world

Tiny watch and hearing-aid batteries use their own codes (you'll see numbers with no CR or LR). For those, a jeweler or the shop that sold the watch can match the exact one — or bring the old cell to me and we'll read it together.

The mix-ups I see most often

A few honest mistakes account for most coin-cell trouble. Knowing them ahead means you'll breeze right past them.

- **Grabbing a CR2025 for a CR2032:** same width, but thinner — it sits loose and may not make contact. Match all four numbers.
- **Mixing up CR and LR:** different voltage. Match the letters, not just the size.
- **Putting it in upside down:** the plus (+) side has to face the right way. Note it before you lift the old one out.
- **Blaming a dead tracker on a bad battery:** with a correct, fresh cell, suspect a bitter coating — try an uncoated one.
- **Leaving spares and dead cells loose:** a real danger to children. Store them high and sealed, tape the dead ones.

! Never force a plug or a cell

If a coin cell won't sit flat and let the cover close with gentle pressure, it's the wrong size or facing the wrong way. Stop and check the code and the plus side rather than forcing it.

Little habits that make them last

Coin cells are hardy, but a few gentle habits get you the full life out of each one and keep your gadgets reliable.

Handle a cell by its edges and give both faces a quick dry wipe before fitting it, so skin oils don't dull the contact. Don't carry loose cells in a pocket or purse with coins or keys — metal touching both faces can short the cell, drain it, and even warm it up. Keep them in their card until the moment you need one.

If a gadget will sit unused for many months — a spare remote, a seasonal decoration — it's fine to take the cell out and store it sealed, the same way you would with ordinary batteries. That spares you a surprise later and keeps the contacts clean.

✓ A sign the cell, not the gadget, is tired

A remote that needs a firm press, a scale that reads faintly, or a fob you have to stand close to the car to use — those are classic low-coin-cell signs. Swapping the cell is the cheap first thing to try.

A fresh, correct cell and it still won't work?

Now and then you do everything right and the gadget stays quiet. Here's the calm, orderly check before you assume the gadget is done for.

First, confirm the plus (+) side faces the right way — the most common slip. Next, make sure the code truly matches, letters and all four numbers. Then wipe both the cell and the little contacts with a dry cloth; a film or a speck of grime is a frequent culprit. If it's an item tracker, remember the coated-cell issue and try an uncoated CR2032.

If none of that does it, the contacts inside may be bent or corroded, or the gadget itself may have failed. That's a fine moment to bring it to me — often it's a two-minute fix, and if it's truly done, I'll tell you straight rather than sell you a battery you don't need.

★ Bring me the stubborn one

A gadget that won't take a fresh, correct cell is a satisfying little puzzle. Show me the device and the battery and we'll sort it — a clean contact, the right way round, or the right uncoated cell. Call (330) 200-8042.

Your quick reference, start to finish

The short version you can lean on any time a fob or remote goes quiet.

- ❑ Read the code on the flat side — letters, then four numbers.
- ❑ Letters = chemistry (CR lithium, LR alkaline); match them.
- ❑ First two numbers = width in mm; last two = thickness in tenths of a mm.
- ❑ Match the exact code — close is not a match.
- ❑ CR2032 is the most common; bring the old cell or its code to buy.
- ❑ If a tracker won't wake with a good cell, try an uncoated CR2032.
- ❑ Store spares and dead cells high, sealed, and out of reach.

★ Keep this guide in the drawer

You don't have to hold any of this in your head. Keep these pages with your spare cells, and when in doubt, I'm a phone call away at (330) 200-8042.

Common Questions

The questions I hear most about coin and button batteries, answered plainly.

Q: How do I know what size my fob or remote takes?

Read the code on the flat side of the old cell — something like CR2032. If the print has worn off, check inside the battery compartment or the gadget's little manual, where the size is often printed too.

Q: What does a code like CR2032 actually mean?

The letters are the chemistry (CR is lithium), the first two numbers are the width across in millimeters (20 mm), and the last two are the thickness in tenths of a millimeter (3.2 mm). So CR2032 is a 20 mm wide, 3.2 mm thick lithium cell.

Q: Can I use a CR2025 if the fob calls for a CR2032?

Better not to. They're the same width but the 2025 is thinner, so it can sit loose, lose contact, and hold a little less charge. Match the exact code — all four numbers — for a reliable fit.

Q: I put a brand-new CR2032 in my tracker and nothing happened — why?

Often it's a bitter child-safety coating on the cell getting between it and the contacts in a very low-power gadget. Try an uncoated CR2032 of the same size, and store it extra carefully away from children.

Q: Are dead coin batteries safe to throw in the trash?

Treat them as dangerous. A used coin cell can still burn a child if swallowed, so tape over each one, keep them out of reach, and take them to a battery-recycling drop-off or follow your local rules.

★ Still holding a mystery cell?

Reading a coin-cell code is one of my favorite quick jobs — fast, satisfying, and it gets a quiet gadget working again. Call or text (330) 200-8042 and we'll find the exact size together.

A reassuring word to end on

I don't want to leave you fretting over tiny print — I want to leave you confident. There's a real difference.

Coin cells seem mysterious only until you know the code reads in three simple pieces: the letters for chemistry, the first two numbers for width, the last two for thickness. You've now got that. Nine times in ten the answer is CR2032, and even the exceptions are just a careful read of the flat side away.

Match the exact code, keep the little cells up high and away from children, and recycle the dead ones with a bit of tape. Do those three things and coin cells stop being a worry and go back to being what they are — handy little batteries that last a good long while.

✓ Small habits, big payoff

Read the whole code. Match it exactly. Store them high. Three small habits that turn a confusing errand into a two-minute job you'll do with ease.

Two things to do today

While it's fresh, take care of the two steps that save you the most bother later.

First, gather every loose and spare coin cell you can find — new and dead — and move them to one high, sealed, out-of-reach spot, taping the dead ones. Second, for the gadget you most rely on, like your car fob, read the code now and jot it down, so when the day comes you already know the size.

The rest — the exact swap, the stubborn tracker, the recycling run — can follow whenever it suits you. But the gathered cells and the written-down code are today's quick wins, and they're the ones that count most.

★ Need a hand getting started?

If you'd like company for the gather-up, or help reading a worn code, that's exactly the kind of visit I love — quick, friendly, and it clears a small worry. Call (330) 200-8042.

You don't have to do this alone

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

I hope this guide made finding and replacing coin and button batteries feel a little less daunting and a lot more doable. Keep it in a drawer with your other home papers, come back to a page whenever you need it, and don't worry about memorizing anything.

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

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

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

Common Coin-Cell Sizes

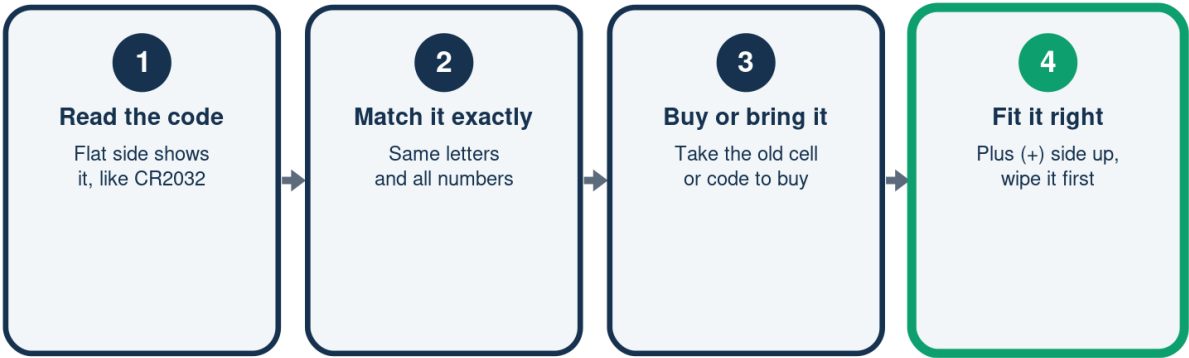
A short list covers almost everything in a normal home

	Size across	Where it turns up
CR2032	20 mm, 3.2 thick	Fobs, remotes, scales
CR2025	20 mm, 2.5 thick	Thinner fobs, cards
CR2016	20 mm, 1.6 thick	Thin remotes, keys
CR1632	16 mm, 3.2 thick	Trackers, slim fobs

Same width, different thickness -- match all four numbers.

From Code to New Cell

The whole swap, in order, without the guesswork



Close is not a match -- a thinner cell sits loose.

What the Code Means

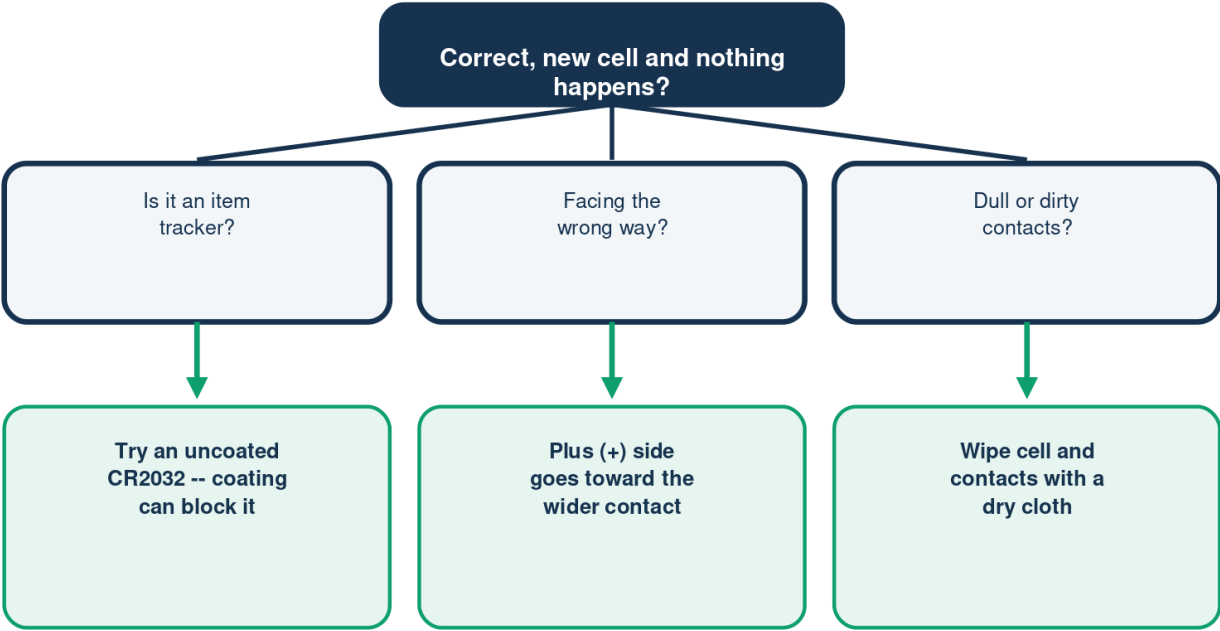
Read CR2032 in three little pieces

	Tells you	Example
First letters	The chemistry	CR = lithium
First 2 digits	Width in mm	20 = 20 mm
Last 2 digits	Thickness	32 = 3.2 mm
So CR2032 is	20 mm wide	3.2 mm thick

LR means alkaline (1.5 volt) – match the letters too.

Fresh Cell, Still Dead?

Work through the three usual reasons



Still dead? The gadget's contacts may be bent -- bring it to me.

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



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A Note From Bill

A quick note from Bill.

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

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