FREE HOMEOWNER GUIDE

Outlet or switch buzzing or crackling? What the sound means

The answer, first

Ordinary outlets and switches should be silent. A faint, steady hum from a dimmer is common and usually harmless. A buzz from a plain switch or outlet, and any crackling, sizzling, or popping, means electricity is jumping across a poor connection.

That is arcing. It makes heat, and it is one of the main ways electrical fires start inside walls. Stop using the outlet or switch and turn that circuit off.

Match the sound to the cause

Place the sound first. Turn things off and unplug them one at a time, and listen close to the wall, the bulb, and the device in turn.

- [ ] A faint steady hum from a dimmer, louder at low settings: the dimmer and bulbs are mismatched
- [ ] A hum from the bulb or fixture, not the wall: the bulb or its built-in driver
- [ ] A buzz from a plug-in adapter or charger: the adapter, not the outlet
- [ ] A buzz from an outlet only while something is plugged in: the outlet has lost its grip on the plug
- [ ] A buzz or crackle from a plain switch while the light is on: a worn switch or a loose wire
- [ ] Crackling, sizzling, or popping from any outlet or switch: arcing. Turn the circuit off

The dimmer hum

A dimmer works by switching the power on and off many times a second, and that rapid switching can make the dimmer or the bulb vibrate. It is usually worse with LED bulbs on an older dimmer built for incandescent bulbs, with bulbs that are not marked dimmable, or with a dimmer loaded close to its limit.

The fix is an LED-rated dimmer matched to the bulbs it controls. A dimmer that is hot instead of slightly warm, buzzes loudly, or makes the lights flicker is overloaded or failing and should be replaced.

Why loose connections make noise

When a wire is loose under a screw, or sits in a push-in spring clip on the back of an outlet that has relaxed with age, the current has to cross a gap that keeps opening and closing. Each crossing is a tiny arc. You hear it as a buzz or a crackle. The arc also pits the metal, which widens the gap, so the problem only grows.

Worn outlet contacts that no longer grip a plug do the same thing, and so do the contacts inside a worn switch. Our post on outlets that will not hold a plug covers the outlet version. Older Portland homes have more of this because the devices are original, and houses from the late 1960s and early 1970s with aluminum wiring are known for connections that loosen.

AFCI breakers are built to detect this kind of arcing and shut the circuit off, and many older homes do not have them. Our guide to AFCI, GFCI, and surge protection explains what each one does. If the noise is coming from the breaker panel itself, that is a different problem with its own page: why is my electrical panel buzzing.

What to do right now

If you see smoke, flame, or black marks spreading on the wall, get everyone out and call 911. Otherwise work through these steps. A burning smell from an outlet along with the noise makes it a same-day call.

- [ ] Unplug whatever is in a noisy outlet, pulling by the plug and not the cord
- [ ] Turn a noisy switch off and leave it off
- [ ] Feel the cover plate with the back of your hand. Warm or hot means stop using it
- [ ] Smell for burning or hot plastic
- [ ] If it crackled, is warm, or smells, switch that breaker OFF and leave it off
- [ ] Do not take the cover plate off or tighten anything with the power on

What an electrician does to fix it

We turn the circuit off, pull the device out of its box, and read the damage: pitted screws, melted insulation, browned plastic. The repair is to cut the wire back to clean copper, fasten it under the screws, and install a new device of the right rating. Because the other outlets and switches on the circuit were wired at the same time, in the same way, we check them too.

For a humming dimmer, we match a new dimmer to the actual LED load. All of it is everyday electrical repair.

Frequently asked questions

Is it normal for a light switch to buzz?

A faint hum from a dimmer switch is common and usually harmless. A plain on-off switch should make no sound once it is on. If an ordinary switch buzzes or crackles, a contact inside it is worn or a wire on it is loose, and it is arcing. Turn it off and have it replaced.

Why does my outlet buzz when something is plugged in?

First check whether the sound is coming from the device. Many chargers and adapters hum by themselves. If the outlet itself is buzzing, its contacts have probably lost their grip on the plug, or a wire behind it is loose, and the current is arcing across the weak spot. Unplug it and stop using that outlet until it is repaired.

Is a crackling outlet an emergency?

Treat it as urgent. Crackling, sizzling, or popping is the sound of arcing, which makes enough heat to ignite what is around it. Unplug what is in the outlet, turn off the breaker for that circuit, and call a licensed electrician. If you see smoke or flame, leave the house and call 911.

Why does my dimmer switch hum?

Dimmers switch the power on and off very quickly to lower the light level, and that can make the dimmer or the bulbs vibrate. It is worse when LED bulbs are on an older dimmer, when the bulbs are not dimmable, or when the dimmer is near its load limit. An LED-rated dimmer matched to your bulbs usually cures it.

Can a buzzing outlet or switch cause a fire?

Yes, if the buzz is from arcing at a loose or worn connection. Arcing makes concentrated heat right next to plastic, wire insulation, and wood framing. The Electrical Safety Foundation International lists unusual sizzling and buzzing sounds among the signs that call for an electrician right away.

Sources

1. Home Electrical Fires, Electrical Safety Foundation International (ESFI). https://www.esfi.org/home-electrical-fires/
2. Home Electrical Safety Checklist (Publication 513), U.S. Consumer Product Safety Commission. https://www.cpsc.gov/s3fs-public/513.pdf
3. Q & A: Arc Fault Circuit Interrupters, Electrical Safety Foundation International (ESFI). https://www.esfi.org/q-a-arc-fault-circuit-interrupters/

> **Need a licensed electrician in the Portland area?**
> Call Smiley Electric at (503) 484-7556 (Mon–Sat, 7am–5pm) or visit smileyelectric.net/contact. For sparks, smoke, a burning smell or a hot panel, turn off the power if it is safe and call right away.

Reviewed by Joshua Smiley, owner & master electrician, Smiley Electric. Last reviewed November 13, 2026. Online version: smileyelectric.net/help/outlet-or-switch-buzzing/. General information, not a substitute for an on-site inspection.

Cite this page: Smiley Electric. “Outlet or switch buzzing or crackling? What the sound means.” smileyelectric.net/help/outlet-or-switch-buzzing/. Last reviewed November 13, 2026. You are welcome to quote, print or share this page with credit to Smiley Electric and a link to smileyelectric.net/help/outlet-or-switch-buzzing/.